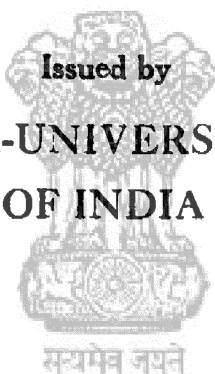


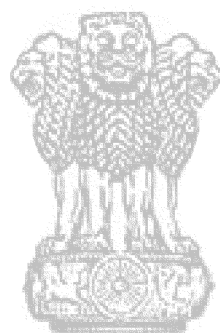
LIST

**Subjects in Arts and Sciences in which
Research work is being done in Different
Universities and Research Institutions**

Issued by
**THE INTER-UNIVERSITY BOARD
OF INDIA**



1945
THE OSMANIA UNIVERSITY PRESS
HYDERABAD-DECCAN



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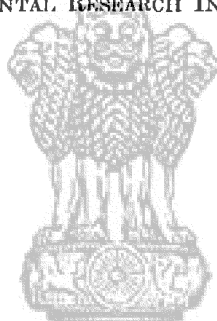
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AGRA.

PH.D. IN ARTS.

<i>Subject.</i>	<i>College.</i>
1. <i>History</i> —"The Mutiny of 1857 in Central India—Malwa".	Holkar College, Indore.
2. <i>Economics</i> —"The Reserve Bank of India".	D.A.V. College, Cawnpore.
3. <i>Economics</i> —"Population trends in India".	Balwant Rajput College Agra.
4. <i>History</i> —"History of Malwa 1401-1565".	Holkar College, Indore.
5. <i>Economic</i> —"The Indian Farm Economy".	Balwant Rajput College Agra.
6. <i>Economics</i> —"Agricultural Credit in India".	Balwant Rajput College, Agra.
7. <i>Economics</i> —"The Economic life of Garhwal".	D.A.V. College, Cawnpore.
8. <i>Economics</i> —"Indian Stock Exchange".	St. John's College, Agra.
9. <i>History</i> —"The relations between the Supreme Court and the Governor-General and the Council and the Courts of the Company in Bengal between 1774-1803".	Agra College, Agra.
10. <i>English</i> —"Patriotism in Modern English Poetry from 1890-1940".	Bareilly College, Bareilly.
11. <i>Sanskrit</i> —"The origin and development of the Alankars in the Sanskrit Literature".	S.D. College, Cawnpore.
12. <i>Hindi</i> —"Mysticism in Modern Hindi Poetry".	S.D. College, Cawnpore.
13. <i>Hindi</i> —"Keshava Das".	St. John's College, Agra.
14. <i>Economics</i> —"Effects of war on Indian Economy".	D.A.V. College, Cawnpore.
15. <i>Economics</i> —"Co-operative marketing in India".	D.A.V. College, Cawnpore.
16. <i>Economics</i> —"State and Indian Industrialism".	D.A.V. College, Cawnpore.
17. <i>Geography</i> —"Agriculture and the distribution of principal crops in relation to population".	St. John's College, Agra.

<i>Subject.</i>	<i>College.</i>
18. <i>Persian</i> —"Persian language and literature in India during the reign of Aurangzeb".	St. John's College, Agra.
19. <i>Economics</i> —"Consolidation of Holdings in India."	Meerut College, Meerut.
20. <i>Persian</i> —"Khawaja Nasiruddin"	St. John's College, Agra.
21. <i>Economics</i> —"Land Tenures in Rajputana".	D.A.V. College, Cawnpore.
22. <i>Hindi</i> —"Treatment of Nature in Hindi Poetry".	St. John's College, Agra.
23. <i>Economics</i> —"The war and the Agriculturists in the U.P".	St. John's College, Agra.
24. <i>Hindi</i> —"Bhartendu Babu Harish Chandra".	Bareilly College, Bareilly.
25. <i>Hindi</i> —"History of Hindi Journalism".	Agra College, Agra.
26. <i>Hindi</i> —"English influence on Modern Hindi Drama and Poetry—a critical survey of Western influence its growth and phases of development in modern Hindi Literature 1880-1940"	Meerut College, Meerut.
27. <i>Political Science</i> —"The Political aspects of Gandhism".	Meerut College, Meerut.
28. <i>History</i> —"History of Bundelkhand 1772-1856".	Imperial Records Dept. New Delhi.
29. <i>History</i> —"The Indian Civil Service"	D.A.V. College, Cawnpore.
30. <i>Urdu</i> —"Metaphysics of Iqbal"	
31. <i>Urdu</i> —"Urdu Poetry in the Rajputana States".	Meerut College, Meerut.
32. <i>Urdu</i> —"Life and Literature under the Kings of Oudh".	Meerut College, Meerut.
33. <i>History</i> —"History of the Ceded and conquered later N.W. Provinces from 1803-1853".	Meerut College, Meerut.
34. <i>Economics</i> —"Industrial Labour in U.P"	D.A.V. College, Cawnpore.
35. <i>Hindi</i> —"Development of Hindi Novels- 1867-1942".	Bareilly College, Bareilly.
36. <i>Economics</i> —"The war and Indian Currency".	St. John's College, Agra.
37. <i>Hindi</i> —"History & development of dramatic Literature in Hindi".	St. John's College, Agra.

<i>Subject.</i>	<i>College.</i>
38. <i>English</i> —"Shakesperian Comedy with examination of the different theories of comedy and the comic".	Holkar College, Indore.
39. <i>Economics</i> —"Construction of Index numbers of wholesale price of Agricultural products in the U.P. Calculation and study".	St. John's College, Agra.

PH.D. IN SCIENCE.

1. <i>Chemistry</i> —"The absorption of Mono and Polybasic acids".	Agra College, Agra.
2. <i>Physics</i> —"The investigation of Raman Spectra of Diphenyl derivatives of Benzene".	Agra College, Agra.
3. <i>Physics</i> —"Photo variation of the conductivity and certain allied properties of chlorine and other gases under Electrical Discharge".	Benares Hindu University, Benares.
4. <i>Chemistry</i> —"Studies in Photo Chemical Reactions with special reference to Photo Chemical after effects".	Holkar College, Indore.
5. <i>Botany</i> —"Investigation on the recurrence and hibernation of the different species of cystopus including those infecting crucifers".	Agra College, Agra.
6. <i>Zoology</i> —"Variations in the arterial system of the common Indian Frog and their significance".	Agra College, Agra.
7. <i>Zoology</i> —"Certain aspects of the arterial system in some Indian birds, with special reference to their evolutionary significance in the class Aves".	Agra College, Agra.
8. <i>Zoology</i> —"Cytological Studies on the oogenesis of certain Reptiles".	St. John's College, Agra.
9. <i>Zoology</i> —"Studies on the vertebrate column and associated structures in the serpents".	St. John's College, Agra.
10. <i>Botany</i> —"Cytology and genetics of inter-genetic and 'Tuterspecific wheat hybrids'".	Imperial Agricultural Research, Institute, Delhi.
11. <i>Zoology</i> —"Studies on the comparative Anatomy of the Tail in Sauria and Phynchocephalia".	St. John's College, Agra.

<i>Subject.</i>	<i>College.</i>
12. <i>Chemistry</i> —"Change of Electrolytic solution Pressure due to strain".	Agra College, Agra.
13. <i>Chemistry</i> —"Physico Chemical investigations to determine configurations of the geometrically Isomeric Oximes."	Holkar College, Indore.
14. <i>Chemistry</i> —"Studies in Parachors of substances in solution".	Holkar College, Indore.
15. <i>Zoology</i> —"A contribution to our knowledge of the Morphology and development of the Common Yellow Wasp".	St. John's College Agra.
16. <i>Chemistry</i> —"Isomerisation of Thiocyanato".	Agra College, Agra.
17. <i>Chemistry</i> —"Condensation of the Aldehydes with Maloric Acid".	St. John's College, Agra.
18. <i>Chemistry</i> —"Study of the Alkyl derivatives of Guanidine".	Agra College, Agra.
19. <i>Chemistry</i> —"Studies in Kinetics of Chemical reactions in Dark and Light".	Holkar College, Indore.
20. <i>Botany</i> —"Study of the various races of the wheat rust in India".	Agra College, Agra.
21. <i>Botany</i> —"Green ear disease of Jowar and Bajra".	Agra College, Agra.

ALLAHABAD.

FACULTY OF ARTS.

D.Phil. Degree.

1. "British Relations with Bhutan".
2. "The Treatment of Srīngararasa in the Bhakta Poets of Hindi".
3. "India under Lord Amherst".
4. "Life and Works of Suradasa".
5. "The Influence of Sanskrit Literature on Hindi Literature from 1400 A.D. to 1600 A.D.".
6. "Hindi Premakhyanak Kavya".

D.Litt. Degree.

1. "Hindi Semantics".

FACULTY OF SCIENCE.

D.Phil. Degree.

1. "Radio Design and Development".
2. "Mycology (Plant Pathology)".

3. "The Physics of Metals and Alloys".
4. "Cytology".
5. "Astro Physics".
6. "Plant Chemistry".
7. "Mathematics on the topic Hydrodynamics and alactic Dynamics.
8. "Absorption and Dispersion of Optically active and opposite form and their Racaemic modification".
9. "Stereo Chemistry and other allied problems in Organic Chemistry".
10. "Optical and other studies and single crystals".
11. "Mycology-Cytology Fungi".
12. "Galactic Dynamics and Astrophysics".
13. "Functions of Real variable and the Theory of four series".

ANDHRA.

Chemistry.

1. Chemistry of Plant Drugs and Insecticides.
2. Chemistry of Vegetable Dyes.
3. Wax and resin components of plants.
4. Photochemistry.
5. Catalysis and Induced Reactions.
6. Ceramics.
7. Utilisation of Indian Minerals for Chemical Industries.
8. New methods for the detection and determination of basis and acidic radicals.
9. Investigation of Luminiscence phenomena—(a) Boric acid phosphors, and (b) the fluorescence of solutions of O-hydroxy-carbonyl compounds treated with boric acid.

History.

1. Gajapathis of Orissa.

Philosophy.

1. Advaita Vedanta.
2. European Logic and Epistemology.
3. Social Psychology and Psychology of Reasoning.

Economics.

1. Theories of Overproduction.

Mathematics.

1. Theory of Functions, Zeta-Function of Riemann.
2. Configuration spaces of some Dynamical systems.
3. The Mathematical aspect of 'monopoly and imperfect competition'.

Physics.

- ### Technology.

Technology.

- ## Geology.

Geology.

- Botany.*

Botany.

1. Work on the cytology & embryology of Angiosperms.
 - (a) Embryological studies in Thymelacaceae—1. *Thymelaea Arvensis*.
 - (b) " " 2. *Daphne Cannabina*.
 - (c) " " 3. *Wickstroemia canescens*.
2. Flora & Vegetation of the Andhra area—Flora of the Guntur District.
3. Algal Flora of the Madras Presidency—Myxophyceae of the Northern circars.

ANNAMALAI.

Philosophy.

1. Vedanta according to Ramanuja School.
2. Educational and Child Psychology (Tamil).

History.

1. The History of the Zamorins of Calicut.
2. Non-Regulation Areas and their administration.
3. Editing of Fort William-India House Correspondence 1764-66.
4. Administration and Society under Walajahi Rule.

Mathematics.

1. Function Theory. (Singular functions, Integral functions).
2. Topology of convergent sequences;
3. Pado—contact system of circles of a triangle.
4. Geometry of path spaces;
5. Chain theorems in geometry;
6. Curves in the inversive plane.

Physics.

1. Atmospherics.

Chemistry.

1. Fluorencelides;
2. Plant pigments;
3. Decomposition of Sulphonium bases;
4. Isolation of B from Bran.
5. Kinetics of Bromine addition.

Zoology.

1. Structure and Development of a new Fresh water Entoproctan discovered in S. India.
2. Studies in the structure and development of South Indian Unionidae (continued from last year).
3. Some aspects of Pulmonate Development;
4. South Indian Species of the ciliate parasite *Trichodina*.
5. Embryology of *Anabas*.
6. Regional Survey—Fresh-water, estuarine and beach Fauna.
7. Cytological studies in *Sesamum* with special reference to interspecific hybridization and induction of amphidiploidy.

Botany.

1. Cytological studies in *Sesamum* with special reference to interspecific hybridization and induction of amphidiploidy.

Tamil.

1. Translation of Kautilya's "Arthashastra" in Tamil.
2. Editing "Gnamrtam".
3. Compiling Source book of History for "Tamil Literature and translating it in English".

Sanskrit.

1. Lectures on Patanjali's Mahabhasya;
2. Translation of Dhyanyaloka in Tamil.
3. History of Sanskrit Literature in Sanskrit;
4. Historical Tamil Reader on the model of MacDonnell's Vedic Reader.

BENARES.*TEACHERS' TRAINING COLLEGE.*

1. Preparation of Norms for Otis (Group) Tests adapted in Hindi and Urdu Languages.
2. Preparation of Standardised Achievement Tests in School Subjects for different grades.

CENTRAL HINDU COLLEGE.

1. The theory of Rasa in Sanskrit Drama.
2. Dramatic Representation in Ancient India.
3. Political Theories in the Mahabharata.
4. Philosophy of the Srimadbhagavat.
5. The Paninian system of Sanskrit Grammar.

Mathematics.

1. Topics in Kinematical Relativity, Cosmology & Relativity, Classical as well as new.
2. Compluent Hypergeometric Functions.

Politics.

1. Social Legislation in India.

COLLEGE OF SCIENCE.

1. Insect Anatomy & Development.
2. Avian reproduction.
3. Cytology & cytogenetics.
4. Fishes.

COLLEGE OF TECHNOLOGY.

1. Sleating of Soaps.
2. Treatment of Unsaponifiable matter in Mahuwa Oil,

3. Vulcanisation of Oils (Faktis preparation for rubber).
4. Constitution of Tiger-fat.
5. Glyceride Structure of Mango-seed Fat.
6. Manufacture of Carbon di-sulphide from Charcoal & Sulphur.
7. Effect of Frying on Ghee and other Edible oils and fats.
8. Malwa Oil Unsaponifiables effect of Soap boiling process.
9. Analysis of **Bahera-seed oil**.
10. Rubber ebonite Manufacture.
11. Lab. Scale experiments.
12. Artificial Silk.

Pharmaceutics

1. Chemical investigation of *Cyperus retendus* and *Cyperus scariosus*. Science and Culture Vol. X No. 3, 1944.
2. Chemical investigation together with Pharmaceutical studies of *Herpestimoniera* with relation to its Pharmaceutical application. Ind. Journ. Pharm. Vol. 6, No. 4, 1944.
3. Chemical investigation of *Hydrocotyle asiatics*.
4. Chemical investigation of *Ortho siphon pellidus*.
5. An introductory note on the chemical investigation of the plant *Viter Negundo*. Science and Culture, Vol. 9, No. 2 pp. 507-508.
6. A note on the chemical investigation of *Vitex negundo* (Pt. I). Ind. Journ. Pharm. Vol. VI, No. 3.
7. Constituents of essential oil of *Anisomelis Malabarica*. (Part I).
8. Extraction of Echitamine from *Alstonia scholaris*.
9. Investigation of the seeds of the plant *Mucuna pruriens* D.C.
10. An alkaloid from *Scilla indica*.
11. Fertilizer effects on the growth and alkaloidal contents *Datura alba*. (Ind. Journ. Pharm. Vol. VI, No. 1-2, pp.13-22, 1944).
12. A histological study of the fruit and seed structure of *Psoralea corylifolia*. (Ind. Journ. Pharm. Vol. 6, No. 3 1944).

BOMBAY.

SCHOOL OF ECONOMICS & SOCIOLOGY, BOMBAY.

Ph.D. Degree.

1. State Regulation of Transport.
2. Social Background of Physical Education.
3. Agrarian Tenancy in Gujarat.
4. The State in relation to Organised Exchanges.
5. Baj Khedval Brahmins of Gujarat.
6. Concept of Profits in Economic Theory.
7. Trends in Agriculture and Population in the Valley of Sind.
8. Insurance and the State.
9. Man and Environment as illustrated by Prof. Geddes's Valley Section.
10. Rural Economy of Gujarat.
11. Population Problem of the Parsees.

12. Population Problem of Gujarat.
13. Poverty among Bombay Parsees, with special reference to the Cowasji Jehangir Colony, Bombay.
14. Position of Hindu Woman.
15. Education in relation to Human Life and Ideals.
16. Economic Aspects of the Present Legal Structure.
17. Social Conditions in India as depicted in Jain Canons.
18. Social Differentiation and Payment for work.
19. Fire Insurance Business in India, with special reference to Western India
20. Agaris.
21. The Sonkolis.
22. Pricing in Planned Economy.
23. Distribution and Economic Progress.
24. Clearing Systems.
25. Industrial Labour in Bombay.
26. Social Background of Hindu-Muslim Relationship.
27. Utopias and the Organisation of Society.
28. A Survey of the Weaving Industry of Gujarat.
29. Problems of Rural Indebtedness in Mysore.
30. Social Psychology of Mr. Gandhi.
31. Village Life in Gujarat, with special reference to Social Service and Reconstruction.
32. Money and Prices in India, 1926-44.
33. The Regional Distribution of Industries in India.
34. Folk-lore of Sind.
35. Exchange Banks in India.
36. Recent Price Trends in Indian Cotton.
37. Industrial Relations in India.
38. Some Aspects of Prostitution in Bombay.
39. Social Insurance for Industrial Workers in India.
40. Imperfect Competition in International Trade.
41. The Pathare Prabhus of Bombay; A Social and Economic Survey.
42. Concerning Sentiments: An Essay in Psychology of Society.
43. Taxation of Income in India.
44. Jain Community: a Social Survey.
45. Folk-lore of North Konkan.
46. Society and the Criminal.
47. Industrial Future of India and Planning for it.
48. Banking and the State.
49. Insurance in India.
50. Indian Film Industry with special reference to Bombay.
51. The Coorgs: A Socio-Ethnic Study.
52. Indian Land Economies.
53. Indian Banking and the War.
54. Foreign Trade of India.
55. Capital Market in India.
56. Social History of Gujarat.
57. Individuality and Society.

M.A. Degree.

1. The Extent of Rationalist Thought in Educated India.
2. **Thakurs: An Ethnic Study.**
3. The Social Survey of the Industrial Labour at the Worli B.D.D. Chawls.
4. Growth of Rational Sentiment in India.
5. Woman in Modern Gujarati Life in Bombay City.
6. Musalman in the Konkan.
7. Indian Shipping.
8. Customs and Manners of Punjab.
9. Female Education in Bombay City.
10. Agricultural Labour in India.
11. The Study of the Kolis of Jalalpur Taluka.
12. Development of Indian Agricultural Policy.
13. Effects of Present War on Indian Social Life.
14. South Indian Community in Bombay.

*Higher degrees by research :**Degree*

- | | |
|-------------|--|
| M.Sc. Tech. | Hypochlorite oxidation of cellulose in presence of reduced vat dyes. |
| Ph.D. | A new method for the synthesis of polyhydroxy flavones. |
| M.Sc. Tech. | Action of light on some organic colouring matters. |

A. works published :

1. Technical education.
2. Second Report on the Bombay University Wool Research Scheme.
3. Wetting agents in textile processing, Part IX. Lauryl-*p*-toluidide-2-sodium sulphonate.
4. Desulphurisation of some high sulphur Indian coals. Part I: Washability of Assam and the Punjab coals.
5. Desulphurisation of some high sulphur Indian coals. Part II: Desulphurisation due to thermal decomposition in carbonisation (Assam and the Punjab coals).

B. Papers forwarded for publication.

1. Anthraquinone Vat Dyestuffs. (Application for a patent).
2. The use of emulsified organic solvents in kier boiling.
3. Power alcohol in India.
4. Experiments on mineral khaki, Part I.

5. Gum *Sterculia Urens* as a thickener in textile printing.
6. Solidification point curves of ternary systems in the saturated fatty acid series.

C. Works ready for Publication.

1. Wetting agents from alkoxyanilines.
2. Wetting agents from alkylanilines.
3. Hypochlorite oxidation of cellulose in presence of reduced vat dyes.
4. Hypochlorite oxidation of cellulose in presence of mixtures of certain vat dyes.
5. Desizing and bleaching by gas chlorination.
6. Gasification of vegetable oils.
7. Action of light on some organic colouring matters Part II.
8. Photo decomposition of some triphenylmethane and nitro colouring matters.
9. Light filters for the mercury arc.
10. Colour fastness standards.
11. A consideration of various light sources as colour fading agents on textile materials.
12. Studies in the quality of Indian wool.
13. Investigations on the vitamin contents of some natural products.
14. Spectroscopic and colorimetric investigations of the vitamin contents of some natural products, Part II.
15. Studies in the Naphtol AS series. Synthesis of further naphthols with paraffin chains.

D. Works in progress.

1. Preparation of Alizarine and Indanthrene Blue.
2. Vat dyes derived from bezanthrone.
3. Vat dyes from the aminoanthraquinones.
4. Sulphurized vat dyes.
5. Halogenated vat dyes.
6. The constitution and purity of some commercial dyes.
7. The estimation of mono- and diaminoanthraquinones, and their use as fast bases in azoic dyeing.
8. Synthetic dyes from catechin.
9. Pigment colours in printing.
10. Azoic dyes.
11. Studies in the Brenthol series.
12. Anthraquinone dyes.
13. Dyes with surface active and chemotherapeutic properties.
14. Textile auxiliary agents and dyes from cashew nut shell oil.
15. Concentration of low-grade limestone by floatation.
16. Studies in the separation of mixtures containing compounds of magnesium by floatation.
17. Manufacture of aniline from chlorobenzene.
18. Preparation of *B*-naphthylamine on a semi commercial scale. Part I.

19. Preparation of *B*-naphthylamine on a semi-commercial scale, Part II.
20. Studies in the separation of mixtures.
21. Studies in settling.
22. Catalytic hydrolysis of chlorinated compounds.
23. Manufacture of chlorides.
24. Starch products.
25. Bleaching of oils.
26. Modification of vegetable oils: 1. Modification of castor oil.
27. Chemical finishes on short staple cotton yarns and fabrics.
28. Oxidation of starch.
29. Action of oxidising agents on certain coal tar colours.
30. Action of oxidising agents on cellulose impregnated with metallic hydroxides.
31. Hypochlorite oxidation of cellulose in presence of mixtures of vat dyes.
32. Action of phenols on drying oils.
33. A study of Indian coal tars.
34. Cracking of Vegetable oils.
35. Suitability of low grade (non-caking) coals for the generation of water gas for manufacturing hydrogen.
36. A study of eutectic ferrous alloys of low melting point.
37. Physico-chemical properties of wool and hair fibres.
38. Preparation and properties of some carbon suspensions.
39. Examination of the colloidal properties of some Indian clays.
40. Photodecomposition of some vat and direct colouring matters.
41. Physical and chemical examination of Indian wool.

ROYAL INSTITUTE OF SCIENCE BOMBAY.

सत्यमेव जयते

Physics Department.

1. Scattering of Light: Intensity Measurements.
2. Thermal Conductivities of Gases in relation to their Viscosities.
3. Effect of Argon on Nitrogen Spectra.
4. Study of Discharge Processes in Arc.
5. Objective Measurement of Spectral Intensities.
6. Study of Surface Tension and Viscosity Relations.
7. Study of Discharge Phenomena in Gases.
8. Complete Structure by Trial and Error Method of Hydrazobenzene.
9. Complete Structure by Trial and Error Method of Anthranilic acid (2nd modification).
10. Measurement of Small Electric Charge.
11. Study of Optimum Conditions for the Manufacture of Photographic emulsions (plates).
12. Study of Optimum Conditions for the manufacture of Photographic emulsions (papers).
13. Solvent Effect in Dipole Moment measurements.
14. Solvent Effect in Dipole Moment measurements.

Mathematics Department.

1. A new test for detecting real periodicities of small amplitudes which are marked either by random, fluctuations or by periodicities of much bigger amplitudes.
2. Variations of the velocity of Seismic Waves with Azimuth.
3. Periodogram analysis of some Meteorological and magnetic data.
4. Analysis of Colaba meteorological data for secular trend.
5. An examination of Sperial Integrals by partial Differential Equations.

Chemistry Department.

1. Magnetic Properties of Diamagnetic Substances.
2. Cataphoretic Velocities of certain Sols.
3. Studies in Diamagnetic Properties of Inorganic Salt.
4. Measurement of Colloidal Contents of Sols.
5. Studies in aqueous solutions of gelatin.
6. Studies in Heterogeneous Reactions.
7. Studies in Electrometric titrations.
8. Studies in Gelatin.
9. Studies in Organic Gels.
10. Studies in Optical Properties of Inorganic Gels.
11. Studies in Diamagnetic susceptibilities of certain salts and ions.
12. Studies in magnetic properties of some substances.
13. (a) Studies of ashes obtained by burning different kinds of
(b) Examination of Containers for storing hydrogen peroxide (c) Preparation of Strontium Carbonate from Strontium sulphate.
14. Recovery of Copper from scrap brass.
15. Recovery of Magnesium and beryllium.
16. Alkali salts of weak acids. Preparation of Pure Lead Monoxide and its Properties.
17. Decomposition of Alkaline earth sulphates.
18. Studies in the decomposition of sulphates.
19. Reaction between Zinc sulphate and alkali chlorides.
20. Reaction between mercuric salts and alkali salts of weak acids.
21. Reactions of Perborates.
22. Studies in Bauxite sludge.
23. Bromination of arylamides and phenolic ester of 2-hydroxy-3-naphthoic acids.
24. Nitration of Chromones.
25. Bromination of Coumarins.
26. Catalytic action of finely divided copper.
27. Studies in Coumarins.
28. Studies in sulphuryl chlorides.
29. Synthesis of quinoline derivatives.
30. Bromination of substances containing two aromatic nuclei.
31. Nitration of Coumarin derivatives.
32. Studies in Chalkones.
33. Bromination of substances containing two aromatic nuclei.
34. Synthesis of naturally occuring substances related to chalkones.

Botany Department.

1. The Climatic Climax Vegetation of the Forests of Matheran & Mahableshtar.
2. Some Physical and Chemical Constituents of Sea-Water of the Bombay Harbour.
3. Further Profile Studies of the Grassland Soils.
4. Illustrated Flora of Mangroves.
5. Chemical Analysis of Wild Grasses.
6. Studies in Chemical Analysis of Fresh-water Ponds containing Pistia & its relations to Malaria.
7. Nicotinic Acid in Bavehi and other Medicinal Plants.
8. Morphological Studies of the Pollengrains of Kolhapur Plants.
9. Respiration of Etiolated & Non-etiolated Plants.
10. Nitrophilous Associations in relation to their Soils.
11. Fasciation in some Indian Plants.
12. Abnormalities in some Indian Plants.
13. Soil Algae.
14. Desmids of Lonavla.
15. Illustrated Ecological Flora of Bombay.
16. Illustrated Ecological Flora of Matheran & Mahableshtar.
17. Study of the Water Moulds present in Watertanks & Aqtria.

Zoology Department.

1. Fresh water Fish and Fisheries of Ahmedabad.
2. Osteology of Indian Cyprinoides.
3. Breeding habits and early stages of Megalops cyprinoides (Brown).
4. Investigation of Vit A, contains of shark liver oils.
5. Life histories of shark, skates & Rays.
6. Myxosporidia of sharks, skates & Rays.
7. Study of Pelagic Fish Eggs and larvae found in Bombay Harbour.
8. Study of Bionomics, Development and distribution of Bombay Province.
9. Study of Bionomics, Breeding Habits and development of shore Fishes of Bombay.
10. Enzyme from Scorpions and some other Invertebrates.
11. Calcium contents of the blood of Pigeon and the time rate of its coagulability.

*ST. XAVIER'S COLLEGE BOMBAY.**Arts.*

1. Studies in Proto-Indo-Mediterranean Culture.
2. The Religion of the Proto-Indians & its Evolution in the Mediterranean Nations.
3. The Decipherment of the Mohenjo Daro Inscriptions.
4. The Relations of the Marathas with the European powers.
5. Selections from Portuguese Documents in the Bombay Record Office—Maratha Series.

6. The Aravidu Dynasty Vol. II.
7. Bibliography of Indological Studies for the year 1942.
8. Transfer of Government to the Crown, 1858-1862.
9. The Maithakas of Valabhi.
10. The Guptas.
11. Historical development & growth of Bombay from 1819 onwards.
12. Early Parsee Enterprise.
13. Anglo-Portuguese Relations in the 17th & 18th Cent.
14. The Devas and Asuras in Vedic Literature.
15. Pre-Maaryan Magadha.
16. Post-Maaryan Magadha.
17. The Last Three Qutb Shahi Sultans of Golkonda of their times.
18. Jainism in Gujarat.
19. A Comparative Study of the Historical development of certain symbols in Proto-Indo-Mediterranean Civilisation & the Indian Origin of Greek Heraldic Devices.
20. Contribution to Maratha History by Shahaji and Vyankoji.
21. The Development of the idea of God in Vedic Literature.
22. Historical Materials in the Letters of Aurangzebe alamgir.
23. The Administration of Lord William Bentinck.
24. Gujarat under Kumarapala.
25. Vijayanagara and the second & third dynasties.
26. The Rani of Jhansi.

SCIENCE.

Microbiology.

List of Research works just completed and titles of those under preparation.

1. Suitability of certain foods and drinks for the growth and distribution of some intestinal pathogenic bacteria.
2. A Contribution to the studies on the Microorganisms associated with the roots of some non-leguminous plants.
3. A Contribution to the studies in the aetiology of Dental caries and Oral Hygiene.
4. Microorganisms associated with the normal eye and various eye and various eye infections.
5. Some of the common Penicillia and Aspergilli: their enzymic and bactericidal properties.
6. Utilization of some of the commercial raw-products of milk for manufacturing nutritious milk products.
7. Some Microbial pigments and their derivatives: a complete biochemical investigation.
8. Microorganisms associated with the process of Tanning of Leather and some other industrial products.
9. Microbiology of some of the Indian pickles and condiments.
10. Physiological and biochemical activities of the organisms belonging to Bacillaceae in Soil.
11. Possibilities of preparing commercially cheap Diastase.
12. Bactericidal substances in various groups of Microorganisms.

Chemistry.

1. Hydroxy Ketones & their derivatives.
2. Substitution in the Salicylic acid and derivatives of salicylic acid.
3. Absorption of halogens by the oxides of alkaline earths.
4. Azomethines.
5. Absorption of basic dyes by woollen fabric.
6. Absorption of Organic & Inorganic acids, by woollen fabric.
7. Substitution in the hydroxy azo-benzene.
8. Substitution in the hydroxy anthraquinone.
9. Dyes from the hydroxy ketones from the naphthalene system.
10. Reaction between Colloidal nickel hydroxide and mercuric salts.
11. Dyes from p-amino anthraquinone.
12. Absorption of acid dyes by woollen fabric.
13. Dyes from salicylic acid.
14. Action of alkaline oxides & other salts on glucose, sucrose etc.
15. Coumarins from phloroglucinol & ar-tetrahydroalpha-naphthiazole.
16. Reactive methylene group in 2,4 diketo-3 phenyl tetrahydrothiazol.
17. Investigation of the hydrolysis of benzoic ester & substituted benzoic esters.

*WILSON COLLEGE, BOMBAY.**Economics.*

1. "Wages of Industrial labour in the Bombay Presidency—Historical and Analytical".

History & Politics :

1. "Village Government in India".
2. "French in Southern India".
3. "Maratha Imperialism".

Sanskrit.

1. Indian Hymns in Rigveda translation & brief annotations.
2. Upamāna-Vaykya-Kosa from Rigveda.
3. Mimamsa—A science of Interpretation.
4. Epic Similies.
5. Soma in Rigveda.
6. Miracles in Rigveda.
7. Role of Bṛhas and Angirasas in Vedic and post-vedic Literature.
8. Asvina in the Rigveda.

Chemistry.

1. Biological value of proteins in fish.
2. Classification of phosphorus compounds in milk and fish.

Economics.

1. "Distribution and Economic Progress"—A theoretical dissertation.

GUJARAT COLLEGE.

1. Thermal Decomposition of Nitrites and Nitrates.
2. Action of Oxides of Nitrogen on Metals and Metallic Oxides.
3. Action of Nitric acid on Metals.

Inorganic Chemistry.

1. Anthelamintics: Compounds related to Santonia.
2. Asymmetric Synthesis.
3. Synthetical Wetting agents.

Alkyl—benzene	}	Sulphuric acids.
„ —naphthalene.		
„ —phenanthrene		
4. Branched chain Fatty acids related to Phthoric acid.

Organic Chemistry.

1. Anti leprosy drugs—M Cyclohexyl fatty acids.
 2. Synthesis of Caryophyllenic acid.
-
1. Coumarins and chromones from quinds.
 2. Ketones derived from quinol.
 3. Studies in Fries migration.
 4. Aluminium in Pechmanu Commarin condensations.

-
1. Dyes derived from Furfurol.
 2. Antimalarials, Compounds related to Atebrin & Plasmoquin.
1. Work: Letters from the court of Directors Fort William (1781-1783) (Being Volume IX of the Publications of the Indian Historical Records Commission, Government of India).
 2. Papers: Some aspects of the Over-seas Trade of Vijayanagara from European accounts (Dr. B.C. Law Commemoration Volume, Calcutta).
 3. The Origin of Bombay (Journal of the University of Bombay June 1944).
 4. An unidentified conquest of Gujarat in the tenth century (Proceedings of the History Congress of Ahmedabad, 1944).
 5. The Antiquity of Cauthai (The Vikramaditya Bimillennium Commemoration Volume, Gwalior).

6. Samundra Gupta's conquest of Kottura (Journal of the Bombay University, 1944-45).

Gujarati.

1. "Manilal Nabhubhai Dwivedi: A study"

BARODA COLLEGE.

History.

1. History of Gujarat (Maratha and European periods).

Economics.

1. Agricultural marketing in Baroda State.

Philosophy.

1. The Swaminarayan Sampradaya.

Marathi.

1. The origin and development of Marathi Drama.
2. The principles and function of literary criticism.

Physics.

1. Land Tenures in India.

Chemistry.

1. Halogenation of substituted amides of (1) malonic ester (2) cyanacetic ester and (3) acetoacetic ester.
2. Studies in salting out effect-influence of alkali halides on the solubility of substituted benzoic acids in water.

Biology.

1. Local mosses.
2. *Notothylus*.
3. Algae.
4. Grasses of Baroda State.
5. Anatomy of dominant grasses of Baroda State.
6. Studies on *Hygroryza* sp.
7. Grasses of Pavaghad.

FERGUSON COLLEGE, POONA.

1. Application of mercury towards preservation of stored food grains.
2. Hydrolysis of Nitriles and study of consecutive reactions.
3. Kinetics of Reactions in liquid-liquid heterogenous systems
4. Study of interfacial tensions in liquid-liquid systems.

5. Cryeleopic determination of molecular weights of oils, fats and waxes, and its application towards detection and estimation of adulteration in butter fat.
6. Reduction of oxyacids salts by aluminio-theomic process.

SAMALDAS COLLEGE, BHAVNAGAR.

1. International Law and relations (A Pamphlet on "Progress of Arbitration in the settlement of Inter-State Disputes" published).
2. Original Interpretation of the Brahmasutra of Badrayana and (ii) Bhagavadgita.
3. The Age of Mahabharata.
4. Mauryan Dynasty-- Political, Economic and Social condition.
5. India's relation with Persia, Afghanistan and Central Asia in the Mediaeval Age.
6. Kathiawar-- Mediaeval and Modern.

D. J. SIND COLLEGE, KARACHI.

1. Scattering of X-rays.
2. Di-electric constants & Dipole Movements.
3. Reaction between Carbohydrates and Proteins.
4. Influence of heat on the physico chemical properties.
5. Exchange absorption of dyes on heat-treated gums.
6. Exchange absorption of salts on heat-treated gums.
7. Swelling and hydration of heat-treated gums.
8. Nutritive studies on heat-treated gums.
9. Analysis of mixtures of oils and fats by electric moment.
10. Action of weak acids on animal hair.
11. Work on the life histories of *Saledora*, *Persica* and *Salvado*.
12. Work on the life history of *Caligomem polygonoides*.
13. Some aspects of the life history of *Terminalia catappa*.

KARNATAK COLLEGE, DHARWAR.

Chemistry.

1. Chemical investigation of seeds of *Jatropha*. *Curcas*.
2. Chemical investigation of seeds of *Citrullus Colocynthis*.
3. $AlCl_3$ and Phosphorus oxychlorides as condensing agents for synthesis of Coumarin-4-acetic acids from Phenols and Acetone dicarboxylic acid.
4. Investigation of a new type of compounds obtained in the above reactions.
5. Thionyl chloride, Phosphoric anhydride and Sulphuryl chloride as condensing agents for Pechmann reaction between Phenols and Acetone dicarboxylic acid.

6. Synthesis of B-aryl glutaconic acids from phenolic ethers and acetone dicarboxylic acid by the use of condensing agents other than Sulphuric acid.
7. Estimation of Hyponitrites.
8. The Thermal Decomposition of Sodium and Potassium Nitrites.
9. Potassium Sulphocyanide as a reagent for the volumetric estimation of Hyponitrites.
10. The Thermal Decomposition of Magnesium Nitrite.
11. Reactions of Hyponitrites in solution.
12. The solubility of pure Potassium Nitrite.

Biology.

1. Biological Control of Guinea-worm and Malaria by means of larvivorous freshwater fishes.
2. Systematic Survey of the freshwater fishes of the Bombay-Karnatak.
3. Collection and Examination of Helminth Fauna from Dharwar.
4. Investigation of snails acting as intermediate hosts in certain flukes.
5. Spermatogenesis and Chromosomes behaviour in some lizards of the family Scincidae and ground grass-hoppers of the Genus *Protoponotus*.
6. A new Species of *Isoetes* from India. Title-Morphology Anatomy, Sporogenesis and the systematic position of one more New Species of *Isoetes* from India.
7. Compilation of Dharwar District Flora.
8. Nutritional values of different varieties of Mulberry plants in Sericulture.
9. 'Infusorian Parasites' of frogs and toads of Karnatak.

History, Economics & Geography.

1. 'Western India---A Regional Geography' (in Press).

Persian.

1. 'Indian Contribution to Persian Lexicography'.
2. Persian Literature under the Muslim Rulers in the Carnatic.

Philosophy.

1. 'The Idea of Personality and its Development in Modern Philosophy' (Metaphysics).

WILLINGDON COLLEGE, SANGLI.

1. The problem of Time.
2. History of the Chalukyas of Kalyani.

3. Writing of Madhav Julian.
4. Study of the local *Eudigogaster*, *Pleretima elongata*.
5. Bombay Government Finance.
6. Economic and Financial Problems of the Transition Period.
7. Literature and Psychology.

DAYARAM GIDDUMAL NATIONAL COLLEGE,

HYDERABAD SIND.

1. "Gandhian Economics" for D.Litt.
2. "Studies in Fuller's Earth". for M.Sc.
3. "A History of Comparative Literature".
4. Philosophy of Sri Arbindo Ghose" for Ph D., to be submitted in 1946.
5. "Marketting of Agricultural Commodities in Sind" for Ph.D. degree of the Bombay University.
6. "Life & Works of Phillips Meadows Taylor for Ph.D. degree of the Bombay University in English.

NOWROSJEE WADIA COLLEGE, POONA.

1. "Marathi poets and poetry from 1818-1866"
2. Critical Edition of Karna-parva.
3. The studies in the Atharva Vedic Literature.
4. History of Persian Literature in the Deccan between 1500 to 1700.
5. English Records at the Peshwa Daftar "Letters on Political Conditions" (1815-1826).
6. Evolution in Modern Marathi Poetry. (1818-1940).
7. Study of the Indian oil seeds.
8. Size of raindrops in different kinds of rain.
9. Life-history of Xerophytic Fern "Actinopteris dicholoma". Cytology of "Agave vivipara".
10. The study of chromone-v-pyrone and furo-chromone obtained from the Ketone obtained by Fries reaction on the butyrate of z-methyl-7-hydroxy chromones.

Bio-Chemistry.

1. A study of the enzymes present in germinating seeds. Part I.
2. A study of the enzymes present in germinating seeds. Part. II.
3. Comparative disintegration of flours and starches with HCl.

RAMNARAIN RUIA COLLEGE, BOMBAY.

1. Floral anatomy of the Acathaceae.
2. Floral anatomy of Ochna Squarrassa.
3. Anatomy of Chiton.
4. Development of some Molluscs.

D. A. V. COLLEGE, SHOLAPUR.

1. Kinetics of the Isomeric transformation of chromium chlorides.
Part I. The transformation of the dark green chromium chloride is under publication in the journal 'Rasyanam', Poona Vol. I (Nov. 1944).
2. A new Indicator' useful in the Titrations of both weak acids and weak bases.
3. Reduction of chromic acid and of Alkali chromates with oxalic acid.
4. Studies on the compounds formed in the reactions between oxalic acid and alkali oxalates.
5. Feeble paramagnetism of chromium trioxide, alkali chromates and some metallic oxides.

DIARMENDRASINHJI COLLEGE, RAJKOT

1. Representative Institutions in Modern India.
2. 'Gandhian Plan for the Economic Development of India', and the following two volumes:
(a). 'Cottage Industries and their Role in National Economy'.
(b). 'Indian Political Tangle'.
3. Published a brochure on 'Family Employment'.
4. 'An Introduction to Industrial Labour Welfare'

*R. A. PODAR COLLEGE OF COMMERCE & ECONOMICS,
BOMBAY.*

1. "Theory of Profit"

*HARGOVANDAS LAKSHMICHAND COLLEGE OF COMMERCE,
AHMEDABAD.*

1. The Economic Consequences of Inflation in India during the Present War.
2. Economic Relations of Indian States and British India.
3. A Comparison of the Effects of the two Great Wars on the Cotton Textile Industry.
4. Small Scale and Cottage Industries of Ahmedabad.
5. Labour conditions in the Cotton Textile Industry of Ahmedabad.
6. The Finances of the Ahmedabad Municipality.
7. Housing conditions in Ahmedabad with special reference to Co-operative Housing.
8. Trade and Transport of Gujarat.
9. Organised Markets in Ahmedabad.
10. A study of the Organisation of Cotton Textile Industry in Ahmedabad.
11. Road Transport in India.
12. The Problem of Cross Freights in India.

BRIHAN MAHARASHTRA COLLEGE OF COMMERCE, POONA.

1. The Bombay Money Market.
2. Philology: Prakrit & Marathi.

SECONDARY TRAINING COLLEGE, BOMBAY.**Ph.D.**

1. The Secondary School Curriculum and its working in the Province of Bombay.

M.Ed.

1. Group Intelligence Tests. (Marathi).
2. A study of different forms of rewards and punishment.
3. The Problem of Literacy in the Ratnagiri District.
4. Shah Waliullah's Philosophy of Education.
5. The Problem of Industrial Education in Bombay Province.
6. A survey of the Education of Muslims in the Province of Bombay after the collapse of the Moghal Empire upto 1940 with special reference to the position of urdu in the scheme of Education followed in this province.
7. History of Education in Bombay Presidency from 1820-1840 based on Government Manuscript records.
8. A critical study of some recent experiments in Education in India.
9. The Training of Teachers in India.
10. Mental Measurement, Individual Intelligence Tests—standardizing them in Gujarati.
11. The place of Geography in the Primary and Secondary schools (with special reference to Bombay Province).
12. Reading—silent and oral, through Marathi.
13. The Reproduction Vocabulary (Marathi) of Higher Primary pupils.

SHREE MAHARANI TARABAI TEACHERS COLLEGE,**KOLHAPUR-SHAHUPURI.**

1. Depth Psychology.
2. Teaching of Mathematics in Secondary Schools.
3. Activity Analysis of Secondary school pupils.
4. Survey of Educational Development in Satara District.
5. Compulsory Primary Education with special reference to Bandra (B.S.D.).

S. T. COLLEGE, BELGAUM.

1. The Educational Survey of Alibag Taluka.
2. Constancy of Binet I. Q.
3. Educational Survey of Satara District.
4. The Primary Teacher.

5. Child's Education through Parental co-operation.
6. Primary Education of girls in the province of Bombay.
7. Private Enterprise in Primary Education in the province of Bombay.
8. Language ability of Kamada School-going Children.
9. Teaching of Mathematics in the High Schools of U. P.

SECONDARY TEACHERS' TRAINING COLLEGE, BARODA.

1. Recent Trends in Adolescent Psychology.
2. Removal of Mass Illiteracy in India.
3. Comparison of Perseveration of Gujarati and Marathi Secondary School Children.
4. Education in Kashmir.
5. Teaching of Gujarati in Secondary Schools in Bombay Presidency.
6. Education in Baroda State under Sayaji Rao III.

KING GEORGE V. INSTITUTE OF AGRICULTURE,

SAKRAND.

Chemical & Physiological Section.

1. Effect of oil-cake, sulphate of ammonia and compost on the yield and quality of Wheat Crops.
2. The course of decomposition of oil-cakes in soil.
3. Mode of nitrification in soil.
4. Effect of sowing dates and manuring on the yield of cotton.
5. Effect of ammonium sulphate and seed rate on late sown wheat.
6. Effect of different soaking doses on the yield and quality of wheat crop.
7. Effect of continuous crops with wheat on soil fertility.

Botanical section.

1. Introduction of ployploidy by colchicine and other allied drugs and its economic importance.
2. Investigation on wheat, cotton and Bajri to evolve better varieties than the existing ones by selection, breeding etc.

Agricultural section.

1. Manurial, irrigational requirements of sugarcane.
2. Varietal trials of sugarcane.
3. Effect of mixed cropping on the yield of cotton.
4. Effect of shallow and deep ploughing on the yield of cotton and wheat.

Mycological section.

1. Root rot of cotton.
2. Stem rot rice.
3. Wilt of gram.

Entomological section.

1. Study of life cycle, seasonal history of parasites and host plants of.--
 - (a). Till leaf roller.
 - (b). briyal lace wing.
 - (c). **Gram pod borer.**
2. Incidence of
 - (a). Boll worm of cotton.
 - (b). till leaf roller.
 - (c). Sugarcane mites and their parasites.

Horticulture section.

1. Preservation of fruits and vegetables.
2. Establishment of new types of fruits and flowers.
3. Dehydration of vegetables.

COLLEGE OF AGRICULTURE, POONA.

1. Horticulture.
2. Plant Pathology.
3. Botany.
4. Entomology.
5. Agronomy.
6. Agril. Chemistry.

N. E. D. ENGINEERING COLLEGE, KARACHI.

1. Correlations between linguistic (Cultural) Regions and the Physiographic Divisions of India, Burma and Ceylon.
2. Planning for India's Unity in Diversity.
3. A Regional Survey of the Ganges-Gogra Doab.
4. A Plan for the Development of the Thar Desert in Sind—A Study in Applied Geography.
5. Sind's Contribution towards National Planning in India, based on her geographical features.
6. Population Trends of Parsee Settlements on the West coast of India.

LAW COLLEGE, POONA.

1. Collection of Hindu Law Texts—Vol XXIX—General Introduction to the Hindu Law Texts.
2. Rights of women - Under Hindu Law. (Sir Lallubhai A. Shah. Lectures for 1939, published by the University of Bombay).

GRANT MEDICAL COLLEGE, BOMBAY.

1. "Plasma proteins in health and disease".

SETH G. S. M. COLLEGE, PAREL.

Bacteriology.

1. Bacteriophage action in E. Typhi.
2. Variation in the virulence of M. Tuberculosis.
3. Enquiry on "Anaerobic Wound Infections".
4. Bacteriological & Biochemical study of the Aroma producing micro-organisms in curds, butter and other milk products.

Pharmacology.

1. Enquiry on Indigenous drugs: Erythrina Indica and Daemia extensa.

Nutrition.

1. Fat metabolism.
2. Soya Bean.
3. Analysis of foodstuffs.
4. Researches on vitamin D.
5. Researches on vitamin C.

Biophysics.

1. Enquiry on Excitation and accommodation constants in nerves.

IMPERIAL VETERINARY RESEARCH INSTITUTE,

IZATNAGAR.

1. Simple physiological studies on domesticated animals.
2. Epizootiology of animal disease, with special reference to the influence of climatic factors on animal disease in India.
3. Bacterial diseases, e.g., Infectious, Brucellosis, Anthrax, Black-quarter. Haemorrhagic Septicaemia etc.
4. Virus Diseases, e.g., Rinderpest, foot and mouth disease, Ranikhet disease of poultry.
5. Protozoological, helminthological and entomological investigations e.g., Trypanosomiasis and piroplasmosis and peritonitis of cattle and fascioliasis.
6. Problem of animal nutrition e.g., deficiency diseases, Cartone in animal nutrition, protein requirements of animals, Alkaline treatment of straw, Nutritive value of indigenous grasses and leafy fodders, Nutritive value of Vanaspati.
7. Poultry Science—Breeding, Nutrition. Egg Quality, Egg drying.
8. Animal Genetics e.g., Artificial insemination.
9. Improvement of Biological Products.
10. Damage to hides and skins from various causes.
11. Improvements of fodder crops, small scale trials.

<i>General</i>	<i>Puranas</i>	<i>Language-General Sanskrit</i>	<i>Gujarati</i>
1. Critical edition of Vijñāna Bhikṣu's Yogavartika ..	1. Critical edition of Vaiṣṇava ..	1. Uktivyakti Prakā- raṇa. ..	1. Critical edition of Yogasāstra Balava- bodha one of the earliest Gujarati Prose work. ..
2. Comparative study of Dhātupāṭha. ..	2. Studies in the Bhagavata Purana ..	2. Śṛīngaramanjari ..	2. Munshi—a critical study. ..
3. Prakrit languages and their contribution to Indian Culture. ..	3. Critical study of Markandeya Purana...	3. Vinayasūtra ..	3. Tolera Nataka ..
4. Ashvins in the Vedic Literature. ..	4. India as reflected in the Puranas ..	4. Kautilya Artha- śāstra. ..	4. Jagatni Striyo ..
5. Indian Culture. ..	5. Critical edition of Paumaceviya the Jain Ramayana. ..	<i>Prakriti</i> 5. Chandralekha- suttaka. ..	5. Jagatni Balako ..
6. Bhaṇḍavyāsa Śrīrāmāyaṇa Sūtra with Bhāṣya ..	6. Puranas a Critical Survey. ..	6. Līlāvatikā ..	6. Kalapi ..
7. Hindu Polity ..	7. Epic and Puranic studies. ..	7. Rīṣṭasamuccaya ..	7. Gandhiji a litera- ry study. ..
8. Rabindranāth Ta- gore. ..		8. Jīvanpancha- mīkā ..	8. Kavya Vichar ..
9. Pramanavartti- kalankara ..		<i>Marathi</i> 9. Kalanidhi ..	9. Shahuama ..
10. Dharmashastras		<i>Apabhraṃsa</i> 10. Sandeśasāsa Rajasthani ..	10. Gujarati Kīrti Gadha ..
11. Introduction to Dharmashastras. ..		11. Rajasthani Purani Date ..	11. Prachiya Gujarati Gadyani Darshan. ..
		12. Rajasthani Gita Samgraha ..	
		<i>Singhi Jain Series</i> Annual report pp. 10 & 11 ..	

VIDYA BHAVAN

<i>Philology</i>	<i>Philosophy</i>	<i>History and Archaeology</i>	<i>Jyotish</i>
1. Comparative grammar of Arya (Indo-Iranian) Languages .	1. Psychology in Indian Thought ..	1. Glory that was Gurjara desa Parts .. II & IV. "Gujarat in Magadhan and Classical ages" and "Life and Culture of the Chalukyas of Patana." ..	Critical edition of Lilavati. ..
	2. Mimamsa Samgraha.	2. Indus Valley Civilisation. ..	
	3. Tattvaloka ..		
	4. Sankhya & Yoga ..		
	5. Bhagavata Dharma (Vaishnavism a Historical Retrospect).		
	6. Bhagavad Gita and experiential approach.		
	7. Arthavadadivichara. ..		

सत्यमेव जयते

**DECCAN COLLEGE POSTGRADUATE AND RESEARCH
INSTITUTE, POONA.**

1. A Synonymic Dictionary of Indo-Aryan on basic, historical and comparative principles.
2. Bibliography of Indo-Aryan Linguistics.
3. A Dictionary Catalogue of dated Indian MSS.
4. Critical Edition of Visvanatha's Kosakalpataaru.
5. A comparative etymological Dictionary of the Reduplicative Element in Indo-Aryan.
6. Case variations in the Critical Edition of the Mahabharata.
7. Historical Grammar of Apabhramsa.
8. Linguistics Peculiarities of Jnaneshwari.

Sanskrit.

1. A Dictionary of the RgVeda (embodying the very latest researches into Rgvedic exegesis).
2. A new English Translation of the RgVeda as a basis for the above (item No.1.).
3. A comparative and historical study of the traditional methods of rendering Sama-ganas.
4. A study of the RgVeda Mantras rubricated in all the extant Grhya Sutras, from the point of view of their contextual evolution (*vinīyoga-vikasa*) in Vedic Literature.
5. Non-Rgvedic Mantras in all the extant Grhya Sutras an investigation into their sources, interpretation variants and *vinīyoga* in Vedic Literature.
6. Older Literature presupposed by the Sabara-bhasya -critically studied with a view to assess the contribution of Sabara and Jaimini to the exegesis of this literature and to the clarification of sacrificial procedure embodied therein.
7. Etymological equations in pre-Nirukta Vedic literature.
8. A historical survey of the original and development of the conception of the "Waters" in the Mythology of the Vedas, Epics and Smrtis.
9. Early Literature absorbed in the Mahabharata.
10. A Comparative study of a few important sacraments in Vedic and Avestan Literatures.
11. Early Literature absorbed in the Ramayana.

Proto & Ancient Indian History.

1. Prehistoric Archaeology of Gujarat.
2. Cultural Geography and Ethnography from Gujarat Inscriptions.
3. Prehistory of the Deccan.
4. Iconographic Elements in the Mahabharata.
5. Material Culture in the Mahabharata.
6. Megalithic Monuments in India.
7. Jain Monuments in Central India.

Sociology.

1. Anthropometric Survey of the castes and sub-castes of the Marathi-speaking people.
2. Kinship-systems and kinship terminology in India-- A Contemporary and historical survey.
3. Place-names of the Marathi-speaking people.
4. Folk-song and social institutions.
5. RigVeda Brahmins of Maharashtra.
6. Juvenile Crime and delinquency-- a five year Survey of cases treated in the Poona Court.
7. A family-survey of some interrelated Parsee families.

Medieval Indian History.

1. Mediaeval Geography based on epigraphy and texts.
2. Consolidated list of Indo-Muslim Epigraphy.
3. Inscriptions from Cambay (Gujarat).
4. Outline of Political Muslim History of Western India upto 1400 A.D.
5. Deccan School of Painting.
6. Muslim Architecture of Western India.

Dravidian Philology.

1. Historical Grammar of old Malayalam.
2. Syllable theory.
3. Phonetic Shorthand.
4. Vowel Length.
5. Diphthong formation and friction theory of semi-vowels with special reference to the phonemic theory.
6. Physical analysis of Speech Sounds and dialect study.

Semitic Languages and Literature.

1. Arabic Literature produced in the Deccan.
2. Muslim Interest in Sanskrit Learning.
3. Critical Edition, with an Introduction, footnotes, variants, glossary of difficult words and Index in English to Ibn-i Nisha-Ti's Phulben-- a Dakhani poem.
4. Critical Edition, with Introduction, etc., of the Damaru'l Insan, from the unique MS. of the University Library, Bombay.
5. Linguistic peculiarities of Dakhani Folk-Songs.
6. Persian Literature produced at the Bahmanid Court.
7. Dakhani Lexicon.

Marathi History

1. The Theory of the Maratha State.
2. The Maratha Constitution.
3. History of the Maratha Navy.

4. Ranoji Sinde- Founder of the Dynasty.
5. Trimbakrao Mama Pethe--A Biographical Study.
6. Portuguese Maratha Struggles on the Goa border.
7. History of the Konkan (Maratha period).
8. The Condition of Maharashtra on the downfall of the Peshwas
--Economical, political and social.
9. Visaji Krishna Biniwale -- A Biographical Study.
10. Biographical Sketches of Historical Personages--Pilaji Jadhav, Hari Damodar and Raghunath Hari Newalker, Haripant Phadke, Baji Govind Joshi, Jayappa Sinde, etc.

GUJARAT VERNACULAR SOCIETY, AHMEDABAD.

1. Studies in the eight Mandala of the Rgveda.
2. Problems of the Alamara sastra.
3. Editing the Kvyayaprakasa Khandana of Siddhichandra (for the Singhi Jain Series).
4. Gujarat in the Puranas.
5. Acharya Haribhadra and his works, with special reference to his contribution to the Synthetic tendency in Indian Philosophy.
6. Gujarat in Jain Canonical works.
7. Gujarati translation of the 'Vasudeva-Hindi a Prakrit prose work of the 6th Century A.D.
8. Editing of the 'Sasti-sataka Prakarana' a Prakrit Vyakarana; three Balavabodhis in old Gujarati.
9. Apabhramsa portion from Hemchandra's Prakrita Vyakarana; Grammatical discussions.
10. Different stages of the language of Gujarat: modern, mediaeval and Apabhramsa.
11. Development of story-literature in Ardhamagadhi works.
12. Descriptive catalogue of Mss. in the library of the Gujarat Vernacular Society: 1. Sanskrit.
13. History of Gujarat, Muslim Period, Vol: II. (Political).
14. Collection of sources of the History of Gujarat from Arabic, Persian, Turkish, Urdu historical and literary works.
15. Cultural History of Gujarat Muslim Period.
16. An exhaustive list of Sanskrit works translated into Persian.

S. L. D. ARTS COLLEGE, AHMEDABAD.

1. Development of Rasas & Alankars from Bharat down & Jagannathray.
2. 'देशीकाल मालान्' સંપાદન જાણ રત્ન છે. પર્વીસ/પરમા કર્દી ગર્મા છે. હવે પર્વીસ પરમા કરતાં પધાર માગ બાકી છે.
3. અનુવાદ અને ઇતિહાસિક ટિપ્પણ સાથે કલ્પસમન્ હાથ ઊપર છે.
4. 'कहारायणकोम' नामना प्राकृत भाषाना कथाप्रथमो अनुवाद चाला रच्यो છે.

CALCUTTA.

Publications —Books & Articles.

Revised Second Edition of *Languages and the Linguistic Problem* (in "Oxford Pamphlets on Indian affairs" series).

Bharat-Sanskriti, a collection of essays on topics cultural & Linguistic in Bengali.

Europe 1938, Part I, a book of travels in Europe (in Bengali) — the wonderings of a student of language.

The National flag and other Essays, in English.

Bharater Bhasha O Bhasha-samasya, in Bengali, an Introduction to the Languages of India.

An article in English on *Relics of Buddhism in 'Hindu Bengal'*, printed in the "B.C. Law Commemoration Volume".

Vedic Selections.

Study of the Non-Aryan & Foreign Elements in Sanskrit..

Two new types of rafts } Journal of the Royal Asiatic Society,
Bengal coiled Basketry } Bengal.

Assessment of the state of muscular nutrition of Report of the students Welfare Committee for the year 1942.

Report on the Calcutta Destitutes (submitted to Famine Enquiry Commission) on the basis of the survey carried out by the department.

Report on the condition of village affected by famine in nine districts of Bengal (submitted to the Famine Enquiry Commission) on the basis of the survey carried out by the department.

Two reports on the Draft Hindu Code on the invitation of the Rau Committee.

Proceeding with the work on the Chiruz — an old Kuki tribe of Manipur.

The Population Situation in Bengal.

Surveyed famine affected villages in the districts of 24 Parganas, Howrah and Hugli. *A survey of the Calcutta destitutes*.

Origin of History of Museum.

Fish Problem in Bengal.

The Somatometry of the Chinese.

The Fish, Fishing and Fishermen Problems of Bengal.

Notes on—A Bengal Fishing Implements.

Studies on the Heredity of Palmar Pattern Journal of the Indian Anth. Inst. 1940.

On the Palmar Prints of the Bengalis.

Anthropology and Endocrine glands.

Some observation on the Hindu Marriage bill (sent to Rao Committee, Madras).

Theoretical investigations regarding upper atmosphere Cosmic rays.

Nuclear Physics.

- (a) Study of B-ray spectra of RaB, UX.
- (b) Radioactivity of rocks.
- (c) artificial radioactivity.

Technical investigations on the vacuum pumps and compressors.

Technical investigations on the manufacture of air conditioning machineries.

Development of the Ultracentrifuge.

Investigation on the physical problem of the river.

List of papers already published during the year.

1. Ur and Th content of some of the Indian Minerals.
2. On the transmission factor of the B ray screengrid type spectrometer.
3. Transmission factors through potential barriers.
1. Asoka and his inscriptions--a voluminous work in two parts (in the press).
2. Eight Ceylon Lectures delivered at the University of Ceylon and under the auspices of the Dona Alpina Ratnayaka Trust, the Buddhist Brotherhood of the University of Ceylon, the Y.M.B.A., the Mahabodhi Society, and other institutions on the following subjects:—
 - (a) India and Ceylon.
 - (b) A bird's eye view and problems of the Ancient History of Ceylon.
 - (c) Ceylon's contributions to Buddhism.
 - (d) Buddha's greatness and role.
 - (e) Buddhism as personal religion.
 - (f) Buddhism as an institutional religion.
 - (g) Buddhism and its modern appeal.
 - (h) Buddhism and earlier Vedanta.
3. Pratitya-samutpada as basic concept of Buddhist thought.
4. Editing of Buddhist texts based on Gilgit Mss.
5. A history of literature of the Sarvastivada Sect.

ARTS.

Department of Islamic History & Culture.

1. Medieval History of Bengal.
2. Translation of Ibn Kullduris Prolegomena sections on Evolutions of States.
3. History of the Khaljis.
4. The Life and times of Tipu Sultan.
5. Translation of the Rihla (travels of Ibn Battuta part dealing with India) from the original Arabic.
6. Isami's Futuh-U's-Salatin is being translated into English.
7. Bairam Khan-i-Khanan and the early years of Akbar's reign.

Departments of Economics & Commerce.

1. Industrial Finance in India during the War.
2. Village survey with particular reference to the effect of famine in Bengal.

3. Some aspects of War finance in India.
4. Teaching and Research in Economic Statistics.

Department of English.

1. A Spenser and the Pre-Raphaelitis.
2. Main trends in Present-day criticism.
3. Metrical studies in Cynewulf.
4. Studies in Shakespeare's Coriolanus.
5. The Technique of T.S. Eliot: published in Longmans Miscellany (Longmans Green & Co. Ltd.).
6. The Mystical element in the metaphysical poets of the seventeenth century (Oliver & Boyd) Edinburgh & London.
7. British Periodical Press in the Nineteenth Century.
8. Anglo-Saxon Poetic Diction.
9. A paper on Ben Jonson and Milton.
10. The text and sources of King Lear with a view to elucidating the meaning of the play.
11. Introduction to a newly discovered Ms. of Chandidas' Pada-valis.
12. Studies in Vaishnava poetry with reference to Sanskrit sources and parallels in English poetry.
13. Studies in the origin of prose literature in Bengali.
14. Critical appreciation of some ultra-modern Bengali novelists with a view to its inclusion in the second edition of my History of the Bengali novel.
15. A critical and comparative study of Shakesperian comedy.
16. A comparative study of Attic and Shakesperian comedy Both nearing completion.

Department of Ancient Indian History & Culture.

1. Relations between India and China in Ancient times - A monograph on the topic, already published in April, 1944.
2. Sent his Chapter on 'Indian Religions' to be published in the 'Benares History of India'.
3. Edited the Journal of the Indian Society of oriental art. Engaged in writing a comprehensive monograph on 'Hindu Temples..
4. Ancient Indian inscription, both Brahmi and Kharosthi.
5. India's relations with the outside World.
6. Various aspects of Ancient Indian History and Culture, such as Political History, epigraphy, society, religion, numismatics, judicial and rural administration, Sanskrit metre etc.
7. Recently edited a number of inscriptions including the Benares grant of Hariraja and the Kalibhanna grants of the 6th and 34th years of the Somavamsi king Maha Bhahagupta I Jananajaya of Trikalanga.
8. Ancient Indian Sculpture and Painting.
9. Ancient Indian Architecture, A paper on early Bengalee architecture.
10. Orissan Painting.

11. Numismatic study of ancient Bengal. Published a note on the coin of King Rudra Varma in I.H.Q. 1944. Sent a paper on some Gupta coin-types for publication in the Journal of the Numismatic Society of India.
12. Some problems of Indian Architecture.
13. Two papers on 'The Holy Panchaviras of the Vrsnis' and 'Interpretation of some early mediæval sculptures.
14. Chapter on 'Early Foreign coins'.

Department of Philosophy.

1. The Philosophy of William James.
2. On 'Desire'.
3. On 'The nature of religious personality'.
4. On 'Kalidasa, his mind and poetry'.
5. On 'The Social, religious and philosophy of Sriçaitanya and Mahabharata.
6. On 'Acintyabhedadbheda of the Philosophy of Sriçaitanya and his school.
7. History of Sanskrit Literature.
8. Work on 'Rabindrnath, the poet and the Philosopher'.
9. 'History of Indian Philosophy'.
10. 'Recent Advances' in European Philosophy is on its way to completion.
11. Writing the system of Philosophy called the 'Theory of Dependent Emergence' and engaged in a critical and expository translation of the Mahabhasya of Patanjali and also in writing critical work on Asoka.

Department of Psychology.

1. Group Performance Test; Colour fusion; perception of depth; Secondary ego.
2. Standardisation of Temperamental tests; Place of Psychology in post-war reconstruction scheme.
3. Quantitative mental estimate of brightness values.
4. Children's interest.
5. Improvements in Campimeter and Rivalry Box.
6. The Concept of Sublimation.
7. Colour fusion.
8. Quantitative mental estimate of brightness values.
9. Psychological analysis of the vocations of Law and Medicine
Temperament testing.

Applied Section.

1. Group intelligence test with the help of Answer Board; Perception of Radiant Heat.
2. Mental testing & Vocational Guidance.
3. Preference for school subjects.

Department of Pure Mathematics

1. Theory of groups.
2. Theory of numbers.

3. Affine and Projective differential Geometry.
4. Theory of Rings, Groups, hypercomplex systems and their representations.
5. Geometry of spaces in which a quadratic form is distinguished.
6. 'A Treatise on the theory of Functions of complex variables'.
7. Invariants of Webs of curves in R_n .
8. On 2-Webs of curves in R_n .
9. On the invariants of $(n-1)$ Webs of hypersurfaces in R_n .

Department of Arabic & Persian.

1. Critical edition of Risaltun fil-Amal-i-hil Asturlab-by al-Biruni.
2. Four Poetesses of Persia.
3. Life and Teachings of Khwaja Baha-ud-Din Naqshband.
4. Life and Teachings of Shaykh Shihab-ud-Din Suhrawardy.

Department of Anthropology.

1. Two new types of raft.
2. Bengal coiled basketry and engaged on a survey of famine affected areas in Bengal (so far 240 villages surveyed) in collaboration with the Statistical Laboratory. Also proceeding with monograph on 'Santals'.
3. 'Those who came
4. 'A survey of the Calcutta Destitutes'.
5. 'A survey of the Calcutta Destitutes'.

Department of Sanskrit.

1. Sridhara's Kavyaprakasaviveka.
2. Visnumisra's Supadma-Makaranda (both hitherto unpublished works).
3. Bhagabath and its Author (to be published in the Proceedings of All India Orient Conference, Benares).
4. Three Lost masterpieces of Alankarasastra (Pracyavāṇī April, 1944).
5. Durgacarya, the Grammarian.
6. Jaina Philosophy of Non-absolution.
7. Insertion on the identity of authorship of the Dhvanyaloka.
8. A paper on the Philosophy of Sir Gurudas Banerjee.
9. Making an English translation of the Prathesamimāṇse of Hemachandra with notes, introduction etc.
10. Excavations at Bangarh. A monograph dealing with 4 seasons excavations at Bangarh.
11. Publishing an ancient Sanskrit manuscript named Rajavijaya Natakam.
12. Sara-sangraha a work on Vaisnava Literature.
13. Translate the Anumane Khanda, the Upamana Khanda and the Sabda Khanda of Jayanta Bhatta's Nyayabhanjari into Bengali with critical notes.

14. Kasumanjalikarika with Ramabhadra's commentary, with English and Sanskrit Introduction, notes &c., a critical edition.
15. Editing—1. Nyayakusumanjali with, Gunananda's Oviveka and Sankara Misra's O Amoda.
16. Pratyaksadidhiti with Rudra Nyayavacspati's commentary.
17. Compiling—Darsanakosa.
18. Edited and revised the Descriptive Catalogue of Sanskrit manuscripts Philosophy—RASB.
19. An article in Bengali on Subhasikarapataka.
20. Editing—(1) Manjusunamasangiti.
21. A thesis on Buddhist Sarvastivada and its literature for the degree of Ph.D. Engaged in preparing Pratimoksasutra.
22. Two articles on 'Ksanabharigavada' published in the 'Shri-bharati'.
23. One paper 'The 14 Gunasthanas or stages of spiritual development' (to be published).
24. Preparing a comprehensive work on Jaina epistemology.

Department of Modern Indian Languages.

1. Published 'Sreekrishna Vijay' recently. Now engaged in editing Padamrta Samudra by Radhamohan Thakur—an anthology of Bangali vaisnava poetry with commentary in Sanskrit. The work belongs to the latter part of the seventeenth century or the beginning of the 18th.
2. Carrying on researches on 19th century Bengali Literature up to the time of Chandra Gupta.
3. Making investigations into the nature and function of the significant forces in Bengali poetry during the 19th century.
4. A note on some Oriya manuscripts has been completed; and some padas purporting to be the work of Ramananda Ray have been edited.
5. Engaged in writing a history of the Bengali Literature—ready for publication.
6. Done some research work on the Bengali Dramas and contributed an article on special topics in the Bengali Periodical 'Vanga Sri'.
7. During research work with the Mangal-Kavyas with a view to publish a work on the subject.
8. Completed a work, in Bengali, on the principles of aesthetic beauty and making it ready for press.
9. Worked on Bengali Essay Literature and published the results of researches in the form of a book, Bangla Sahityer Ek-dik (one aspect of Bengali Literature).

Department of History.

1. Fall of the Sikhs 1839-49.
2. Indian Constitutional Development in the 19th century.
3. Turkish and Pre-Islamic Turkish History and Culture—including a study of land tenures gilds, classes etc.
4. Completed a book 'The Peshwa and the English Commissioners'.

5. Wrote a paper—'An English manuscript on Shah Alum'.
6. Editing the Asiatic Society Ms on Shah Alum, II.
7. Future constitutional organisation of India.
8. Haider Ali (1779-82).
9. Annexation of Burma.
10. Rajput Studies.
11. British Policy towards the Afghan War of Succession, 1863-1868.
12. Origin of Sikh Militarism.
13. Sikhism and Medieval Reformation.
14. Neutralisation of Afghanistan.
15. An Aspect of the career of Guru Teg Bahadur.
16. An Aspect of the career of Gurm Govind Singh.
17. An Aspect of Sikh Militarism.

SCIENCE.

Pure Chemistry.

1. Wave Mechanics of the reflection and Refraction of waves.
2. Equation for the conductivity of strong electrolytes.
3. Equation for glass electrode cells (have been developed).

Applied Chemistry.

1. Low Temperature Carbonisation of Coal.
2. Chemical Utilisation of Jute Waste.
3. Dehydration of Food-Stuff (Fish).
4. Ascorbic Acid Enquiry.
5. Enquiry into the Chemical Nature and Nutritional availability of Food Iron.
6. Methods for the estimations of Vitamins of the B-group and their assay in Indian Food-stuff.
7. Destructive Distillation of fibrous material.
8. Decarboxylation of fatty acids.
9. Chlorination of vegetable oils.
10. Diethylaniline (Bengal Immunity).
11. Attempts to prepare synthetic rubber.
12. Phosphoric acid under Bengal Industrial Research Board.
13. Studies on Ganges silt.
14. Snake Venoms with special reference to the isolation of the active constituents like cholin esterase and glycolytic inhibition.
15. Pilot plant experiments on manufacture of carbon-di-sulphide
16. Dehydration of Castor oil.

Department of Botany.

1. Studies in the Physiology of Jute.
2. Studies on the effect of Vernalization and Photoperiod on late sown Aman Paddy.
3. Studies on the Physiology of Mustard.

4. Photoperiodic effect in Jute.
5. Preliminary studies on the effects of x-irradiation upon growth and development of Jute plant.
6. Anatomy of Jute stem with special reference to cambial activity and distribution of fibres in relation to leaf-trace system.
7. Differentiation of vascular tissues in *Hibiscus sabdariffa* Linn.
8. Anatomy of *Hibiscus sabdariffa* Linn.

Physiology.

1. Effect of starvation on the alkaline phosphates activity of tissues and the effect of dietary factors on its regeneration.
2. Effect of thermal treatment and hydrogenation on the absorption of a few vegetable oils.
3. Effect of thermal treatment on the absorption of a few animal fats.
4. Alkaline phosphates activity of tissues in experimental scurvy.
5. Phospholipid metabolism in experimental scurvy.
6. Effect of adrenal cortical hormones on the phospholipid content of scorbutic tissues.
7. Effect of adrenal cortical hormones in the enzymic activities of scorbutic tissues.
8. Phospholipid content of organs of rats maintained in normal and scorbutic diet.

Pure Mathematics.

1. Research paper entitled 'On parallelism in Riemannian Space'.

Zoology Department.

1. Life-history, binomics and development of the fresh-water fishes of Bengal.
2. Morphology of termites.
3. Embryology of termites.
4. Embryology of the silk-worm.
5. Digestive system of ants.
6. Morphology of Pulse beetles.
7. Studies on the parasitic nematodes of fishes, reptiles and birds.
8. Studies on the coccidia of Indian birds.
9. Studies on the haemosporidia of Indian birds.
10. Studies on the myzosporida from fish of Bengal.
11. Chromosome behaviour in Grasshoppers during meiosis.
12. Observations on the urinogenital organs of frogs and toads.
13. Studies on the Vascular anatomy of frogs and toads.
14. Systematics of frogs and toads.
15. Observations on the anterior arteries of some Indian birds.

Physics.

1. Design of high Q-Dee circuit for high frequency, high voltage transmission.
2. The study of nuclear reactions on lithium bombarded by protons in the Cyclotron.
3. Operation and working of a saturable transformer ion-gauge for high vacuum (This work has been completed and will be published soon).
4. Study of proportional amplifier for detection and measurement of high velocity charged particles.
5. Design and construction of Lawson-Tyler Type of *B* spectrograph and measurement of *B*-spectrum of RaE (The work is complete and may be published as soon as convenient).
6. The scheme under measurement of the Age of Rocks and Mineral Scheme of the B.S.I.R. under Prof. M. N. Saha has been put under the charge of the Cyclotron Officer Dr. B. D. Nagehaudhuri for the duration of his stay abroad. The following work, in connection with the above scheme has been started:
7. Measurement of Uranium and Thorium content of some minerals by Geophysical methods.
8. Study of the mass-spectrograph method of determination of relative age of minerals according to Nier.
9. Evidence for the Production of Mesons by nonionising unstable particles.
10. X-ray Analysis of Jute Fibre of different qualities under various conditions, Part I.
11. On the origin of Extra spots in the Laue photographs of phlogucine dihydrate.

सत्यमेव जयते
Geography.

1. Land Utilization in the District of 24 Parganas (in Press).
2. The Physiographie and Economic Bases of Urbanisation in the Gond and adjoining lands of the Central Provinces.

Applied Physics.

1. Design of an Engraving machine.
2. Design of Frequency Indicators.
3. Design of Permanent-magnet Loud speakers.
4. Design of moving-iron Instruments of Commercial grade.
5. Investigations into the band spectra of diatomic oxide molecules.
6. Dielectric Strength of Indian Mica.
7. Effect of humidity on the power loss of Indian Mica.
8. Design and Performances of Mica Condensers.
9. Design and Performances of Grid-leak resistors.
10. Sound Absorption coefficients of Indian Materials.
11. Design of an Engraving Machine.
12. Design of Frequency Indicators.

13. Design of moving-iron ammeters and voltmeters of commercial grade.
14. Electrical Properties of Indian Mica.
15. Spectra of diatomic Oxide Molecules.

Applied Chemistry.

1. The Effect of light on the synthesis of Ascorbic Acid by Germinating seeds.
2. Photobiosynthesis of Ascorbic Acid (?) by Germinating seeds.
3. Studies on Indian Coal, Part XI.

List of papers ready for publication.

1. Nature of egg iron.
 2. Studies on the nutritive values of Sun-dried & salted fish.
 3. Nutritive values of Bengal Fresh-water fish.
 4. Studies on the mechanism of Biosynthesis of Ascorbic acid by rats under narcotics in five parts.
 5. Proceedings of food-stuffs on vitamin values.
 6. Methods of estimation of the vitamins of the B. group and their assay in Indian food-stuffs.
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1. Destructive distillation of fibrous material.
 2. Decarboxylation of fatty acids.
 3. Chlorination of vegetal oils.
 4. Diethylaniline.
 5. Attempts to prepare synthetic rubber.
 6. Manufacture of Phosphoric acid.
 7. Volatilisation of Phosphorus.
 8. Catalytic Decomposition of Sodium chloride.
 9. Concentration of phosphatic compounds.
 10. Effect of Cobra (Naja Naja) venom and its constituents on the synthesis of acetyl-choline by the brain cells of the rats and pigeons.
 11. Physico-chemical studies on Heamolysin—Part I, Crystalline Heamolysin (Lecithinase).
 12. Isolation of choline-esterase from Cobra venom.
 13. Physico-chemical studies on heamolysin, Part pH and heat stability of heamolysin.
 14. Physico-chemical studies on heamolysin, Part III, Isoelectric point of heamolysin.
 15. Physico-chemical studies on heamolysin, Part IV, Molecular weight of heamolysin.
 16. Physico-chemical studies on heamolysin, Part V. On the composition of heamolysin.
 17. Studies on the Manufacture of Carbon-di-sulphide.
 18. Studies on the dehydrated castor oil.

Physiology.

1. The effects of thyroidectomy, and feeding of thyroxine and Nicotinic acid upon the endocrine organs (of thyroidectomised animals) is being carried on at present.

Geology.

1. Geological mapping of the Mangpu-Mana-Gayabari-Latpanchor tract in the Darjeelling Hill territories.
2. Determination of the nature of the carbon in the carbonaceous schists of the above region (unpublished).
3. Study of metamorphic zoning in the above region.

Physiology.

1. Effect of starvation on the alkaline phosphatase activity of tissues and the effect of dietary factor on its regeneration.
2. In Progress.—Studies in metabolism of nutritional diseases and their histopathology.
3. Effect of starvation on enzyme systems and their regeneration on different diets under various conditions.
4. Hydrotropy as a factor in absorption of insoluble drugs.

Anthropology.

1. Two new types of raft.
2. Bengal coiled basketry.
3. Engaged on a survey of famine affected areas in Bengal (so far 240 villages surveyed) in collaboration with the Statistical Laboratory. Also proceeding with a monograph on "Santals".

Applied Mathematics.

1. On the Divergence of the solution of a Problem of Plane strain.
2. Boundary value problems of Circular Disks under body forces.
3. On the Convergence of the solutions of Cascade Equations in Cosmic Radiation.
4. Photons associated with a Cascade shower.
5. The Cowling Model and the Hydrogen content of the Sun.
6. On an approximate solar model.
7. On a problem in heat conduction in a sphere.
8. On the representation of Bethe's energy generation formula by a power law (in course of publication).

DACCA.*ARTS.**English.*

1. Life and works of D. G. Rossetti.
2. Galsworthy: His Mind & Art.
3. Eighteenth Century Lyricism.
4. Galsworthy: His art as novelist.
5. Modern Drama.

6. Robert Browning's Theory of Poetry.
7. The treatment of (1) Womanly virtues in Chaucer's poetry.
(2) Women in Miracle and Mystery Plays.
8. The relation between Form and Substance in Poetry.
9. The Influence of French Poetry on the English Decadents.

Philosophy.

1. The Psychology of W. McDougall with special reference to Education.
2. The Nature of Intuition.
3. The Philosophy of Whitehead.
4. The Nature of Inference.
5. Religious Knowledge.

History.

1. Indian Civilization in the Age of Akbar.
2. Wahabi Movement in India.
3. Early History of the Rajputs.
4. Aspects of the Economic History of Ancient India.
5. Human Geography of Ancient India.

Political Science.

1. Early Constitutional System of the East India Company in Bengal.
2. The Indian Constitutional Problem.
3. The Indian Civil Service after 1858.
4. The Freedom of the Press.

Arabic & Islamic Studies.

1. India's Contribution to Hadith Literature.
2. Reconstruction of the Exegesis of Ibn 'Abbas 'Im Tafsir.
3. A Critical Edition of *al-Asma 'Iyyat*.
4. Life and Works of Shah Waliullah.
5. Imam Ibn Taimiyya's Projects of Reform.
6. Mu'tazilite view on Eschatology and Imamate.

Economics.

1. Problems of Post-war Economic Planning in India.
2. Post-war International Currency.
3. Post-war Trade Policy.
4. Agricultural conditions of Bengal in the 19th Century, with special reference to jute.
5. Restrictionism in India.
6. Statistical Survey of the Economic conditions of Agricultural labourers and artisan classes of the Dacca District.

Bengali.

1. Literary Art (Sahitya Shilpa).
2. History of Bengali Dramatic Literature.

Education.

1. The Problem of Primary Education in Bengal.
2. Adaptation of the New Revised Stanford Version of the Binet Simon Scale into Bengali.

*SCIENCE.**Physics.**Wireless :-*

1. Direction finding of Atmospheres.
2. Dielectric Properties of Soils at radio frequencies.
3. Propagation of wireless waves.

X-ray and crystallography :-

1. Extra spots in Laue photographs.
2. X-ray studies of fibres.
3. X-ray studies of soils.

Electricity :-

1. Conductivity of solution.

Botany.

1. Cytology and embryology of Jute.
2. Morphology of *Actinopteris dichotoma*.
3. The morphology and embryology of some phanerogamic parasitic sites of Eastern India.

Mathematics.

1. Diophantine Problems.
2. Theory of Numbers.
3. Entire Functions.
4. Generalized Hypergeometric Series and other special functions.

Chemistry and Soil Science.

1. Utilisation of Horn Waste (Under Bengal Industrial Research Board).
2. Impregnation of bleached Jute fibre with synthetic resins in order to improve quality (Under Indian Central Jute Committee).
3. Desulphurisation of coal (Under Council of Scientific and Industrial Research, Government of India).
4. Cellulose-ethers, their preparation and properties.

5. Utilisation of waste SO_2 gas.
6. Preparation of new synthetic antiseptics.
7. Chemical study of some Indian Medicinal plants.
8. Glucose dehydrogenase and other oxidising enzymes in plant and animal tissues.
9. Metabolism of proteins, fats, carbohydrates and minerals in human beings and animals.
10. Vit. B complex.
11. Soya bean and common Indian pulses.
12. Minerals and carbohydrate metabolism.
13. Vitamin and tissue respiration.
14. On Epidemic Dropsy. Nature of the causative factor or factors and their isolation from argemone oil and toxic mustard oil.
15. Isolation of sterols from mustard oil.
16. Investigations on steroids with special reference to Vitamin D and sex hormones (Under Board of Scientific and Industrial Research, Government of India).
17. Studies on the mechanism of different sterol-colour-reactions.
18. Carbohydrate metabolism: Experimental hyperglycemia and diabetes by injection of different chemical substances.
19. Studies on the chemical constitution and physiological significance of the new antidiabetic plant product (Amellin).
20. Effect of ageing and heat on colloids.
21. Assymmetric synthesis with circularly polarised light.
22. Photochemical reactions (i) decomposition of complex salts,

(ii) effect of Heterogenous light on photochemical reactions.

23. Study of induced circular dichroism of colloids.
24. Weigert.
25. Weigert Phenomenon in thin films of diazo compounds.
26. Photochemical decomposition of certain complex mixtures.
27. Preparation and study of various contact masses for getting synthetic products from blue water gas.
28. Preparation and study of various contact masses for the purification of synthesis gases.
29. Catalytic production of methane from blue water gas.
30. Utilisation of Brass Scraps (Under Bengal Industrial Research Board).
31. Preparation of synthetic antiseptics.
32. Attempts to render Indian Phosphatic mineral available as fertiliser.
33. Isolation of active principles of "Uchebey" (*Momordica Charantia*).
34. Recovery of Elementary Sulphur from Pyrites.
35. Nutrition of rice plant with special reference to nitrogen supply.
36. Organic nitrogen compounds in rice soils.
37. Studies on Laterite and Red soils of India.
38. Base exchange in soils.
39. Water relationships of soils.

DELHI.*Physics.**Experimental.*

1. Experimental study of the spectroscopic aspects of combustion processes in flames and internal combustion engines.

Theoretical.

1. Theory of fundamental particles—Radiation Damping in Classical and quantum theory and its applications to Cosmic Rays.
2. The theory of the liquid state (particularly the 'hole' model)
3. Eigen value problems subject to "artificial boundaries".
4. Thermodynamics of stars. The theory of the variable stars (Anharmonic oscillation; dissipation and energy generation).

*Chemistry.**Research work in progress.*

1. Chemical Examination of the Essential oils of the Ocimum Species.

Research work in hand.

1. Azeotropic estrification.
2. Chemical examination of some Indian essential oils.
3. Chemical examination of the galls of Pistachia lenticas.
4. Condensation with barbituric acid derivatives.
5. Examination of Indian fusel oils.

Mathematics.

1. Differential Geometry: Rules surface of a R-Linear congruence.
2. Elasticity:—Second order effects in elastic problems.
3. Hydrodynamics:—Slow motion of a viscous fluid.
4. Variable stars:—Anharmonic pulsations and the problem generation of dissipation of energy in the Cepheids.
5. Theory of Functions:—Where's Parabolic cylinder functions and Whittaker's confluent Hypergeometric functions.

History.

1. The working of the Central Legislative Assembly.
2. The government Indian Railways considered as a form of public utility Administration.
3. Cultural Relations between India and China.

Economics.

1. An Economic Survey of Bhopal State.
2. The study of Labour conditions in Delhi Province.
3. Marketing Legislation in India.
4. Problem of Rural Economy in India.
5. India's Balance of Indebtedness 1921-1939.
6. India's National Income.

Sanskrit.

1. The ancient civilization of Sindh.
2. Harappa Larkana.

LUCKNOW.*Botany.*

1. Age of the Saline Series in the Salt Range of the Punjab.
 2. Study of the Liverworts of India.
 3. Indian Jurassic (Rajmahal) Flora.
 4. Studies on the Pleistocene macro-and micro-flora of Kashmir.
 5. On the Anatomy of the living and extinct members of *Cyclan-
thaceae*.
 6. Microfossils from glacial tillites (India, Australia and Africa).
 7. Microflora of lower Gondwana beds in Central India.
 8. Spores and other organic remains from Warehha, Salt Range,
Punjab.
 9. A fungus disease of *Acacia melanocylon* and *Poinciana regia*.
 10. Soft rot of Radish.
 11. Studies in the *Ustilaginales*.
 12. Necrosis of the Mango fruit.
 13. Chemical studies in the physiology of Mangoes.
- } under Imperial coun-
cil of Agricultural
Research.

Mathematics.

1. Pure Mathematics :—Theory of functions and analysis.
2. History of Mathematics.
3. Applied Mathematics Hydrodynamics and Dynamics of Crystals.

Chemistry.

1. Photo-catalysis in aqueous solutions.
2. Chemical Activation of oxalate-mercuric chlorides systems.
3. Oxidation of oxalates with hydrogen peroxide.
4. Aromatic amino acids.
5. Ortho-substituted diphenyls.
6. The nature of aqueous solutions of gold chloride.
7. Studies on supersaturation.

Zoology.

1. Morphology of the Oligochaeta.
2. Myology of the Desert Locust *Schistocerca Gregaria*.
3. Cestodes of Amphibians and Reptiles.
4. Anatomy and Physiology of the Indian Scorpion *Palaemonus Bengalensis*.
5. Studies on the Morphology and Bionomics of the Indian Leeches.
6. Survey of the helminth parasites of cattle, sheep and goat in the United Provinces, Bihar, Bengal, and Orissa, (Under Imperial Council of Agricultural Research Scheme).
7. Studies on the life histories and Bionomics of *Gastrothylax crumenifer* and *Trichocephalus ovis*, (Under Imperial Council of Agricultural Research Scheme).
8. Studies on the helminth parasites of Kashmir.
Part. III. Description of a new Alloecadid, *crepidostomum indicum* from *Schizothorax nigar* from Kashmir.
Part IV. Trematodes from amphibia of Kashmir.
9. "Researches on the Ascidian Fauna of the Indian Coasts".
10. "The comparative anatomy of non-ascidians".
11. Studies on the Trematode Parasites of different animals.

Physics.

1. Soft X-ray investigations with vacuum spectrographs.
2. Fine structure of special lines with spectrographs of high resolving power.
3. Investigations of Molecular spectra.
4. Studies in Raman Spectra.
5. Atomic magnetism with sensitive magnetic balances.

Arts.

1. Socialistic Schools of thought in India. (Pol. Science).
2. History—"The growth of Anglo Sikh Relation from 1800-1856".
4. Political Science—"Panchayats in Madras Presidency".
5. Child in English Poetry. (English).
6. Unskilled Labour in Indian Industry. (Economics).
7. Some Hill Tribes of Travancore. (Economics).
8. The standard of Living of Industrial Labour in India, (with special reference to the war period). (Economics).
9. The Development of Electoral System in India. (Pol. Science).
10. The Hindu State as seen in the Epics. (Pol. Science).
11. The Division of Powers in Federations with special reference to India. (Pol. Science).
12. Government and Administration of Nepal. (Pol. Science).
13. Village Panchayats in British India with special reference to U.P. (Pol. Science).
14. Premchand his works and times. (Hindi).
15. Study of a certain Period of Hindi Literature. (Hindi).

SCIENCE.

Zoology.

1. Morphology of the Oil goechaeta.

Mathematics.

1. Analytic Functions of a complex Variable.

Chemistry.

1. Photochemistry.
2. Complex Compounds.
3. Organic Chemistry.

Physics.

1. Spectroscopy.

*Ph.D.**English.*

1. Anti-Rationalism in 19th Century Poetry.
2. The English Influence upon Modern Bengali drama.
3. Symbolism in Modern drama.

Philosophy.

1. Patanjali Yoga and its Christian analogues.
2. The Recuperative Value of Various Sensory Stimuli.
3. The Conception of Mental Personality in the Samkhya Yoga Systems.

History.

1. Deccan policy of the Mughals under Akbar and Jahangir.
2. Hindus under Akbar.
3. British Judicial administration from Wellesley to Dalhousie.
4. Religious policy of the Muslim Rulers in the Sultanate period.

Political Science.

1. The Role of Federal Judiciary in the Constitutions of U.S.A and India: A comparative study.
2. Constitutional Assemblies with special reference to India.
3. Indian Civil Service.
4. Legislative Procedure in India.
5. Working of the Central Legislature since 1919.
6. Production in India during the War.
7. Pauperism and destitution in India.
8. The Regional Distribution of Industries in India.
9. War-time Development of Indian Industries.
10. The Social and Economic conditions of the Doms: A comparative study of various Doms.

11. War Finance in India.
12. Rural Population and Standards of living in over-crowded districts of Northern India.
13. The Minimum wage in Indian Industries.
14. The Jute Mill Industry in Bengal.
15. The Economics of Cattle Population in Northern India.
16. Conditions of Employment and Wages of Women and Children in Indian Industry.
17. Regional Characteristics of Desert Culture: A social Economic survey of Rajputana desert.

Mathematics.

1. Theory of Functions of Real Variables.

Sanskrit.

1. Saiva Dushism.
2. Humour in Sanskrit Literature.

Arabic.

1. Arab Poetesses of the Pre-Islamic Period.
2. Pt. Mahabir Prasad Divedi and his times.
3. Hindi at the Court of Akbar.

Hindi.

1. Women Poets in Hindi.
2. Life and Works of Nagridas.

Political Science.

1. The Status of Women from Matriarchete to Patriarchete.
2. Democratic elements in the Hindu State as found in the Epics.
3. Provincial Autonomy in Madras.
4. Sugar Industry in India with special Reference to State Control.

History.

1. Administration of Justice in British India from Wellesley to Bentinck.
2. Maharaj Gulab Singh (Founder of Kashmir State).
3. Ancient Hindu Education as described in the Upanishads.

D.Litt.

Political Science.

1. Problems of Rural Reconstruction in India (with special reference to the United Provinces of Agra and Oudh).

Zoology.

1. Centipedes and Millipedes.
2. The Fresh-Water mussel, Lamellidens.

Mathematics.

1. Theory of functions.

Zoology.

1. Myology of *Schistocerca gregaria* Forskinn.

Botany.

1. Palaeobotany.

Chemistry.

1. Organic Chemistry.
2. Physical Chemistry.

Botany.

1. Palaeobotany.

Mathematics.

1. Theory of functions.

Botany.

1. Morphology of plants.

Physics.

1. Spectroscopy.

Botany.

Devonian.

1. Devonian spores from S. W. China.

Permocarboniferous.

1. A new species of *Psymmophyllum* from Kashmir.
2. *Psymmophyllum Haydeni*.

Permian.

1. Lower Gondwana spores from Warehha, Salt Range, Punjab.

Permo-Triassic.

1. Microfossils from the Gondwanas near Pali, South Rewah.

2. Triassic plant remains from the Salt Range, Punjab.

Jurassic.

1. A Jurassic flora from Outhea in the Rajmahal Hills.

Tertiary.

1. Bharatwada, new fossiliferous locality in the Deccan.
2. Charophyte remains from the Intertrappeans.
3. *Viracarpou*, a genus of silicified aggregate fruits from the Deccan.
4. *Cyclanthodendron* gen. nov. from Mohgaon Kalan.
5. Microfossils from the Frog Beds of Worli, Bombay Island.
6. The age of the Punjab Salt in the light of recent evidence.
7. Fossil remains from the Saline Series of the Punjab.

Pleistocene.

1. *Woodfordia fruticosa* in the Karewas of Kashmir.
2. *Nelumbo nucifera* in the Karewas of Kashmir.
3. Fossil leaves and cones of Betulaceae from the Karewas of Kashmir.
4. Fossil leaves of *Lilsea lanuginosa* from the Karewas of Kashmir.
5. Fossil leaves of Salicaceae from the Karewas of Kashmir.

MADRAS.

Indian History and Archaeology.

1. A general history of the Deccan and Southern India.
2. Eastern Chalukyas and History of the Sangam dynasty of Vijayanagar.
3. Gupta Polity.
4. Purana Index.
5. The History of the Andhra country 1000-1500 A.D. Subsidiary dynasties.
6. The Suchindram temple.
7. Chiefs of Velanadu.
8. Economic and Social conditions under Kakatiyas.
9. Gajapatis of Orissa.
10. Western Gangas.
11. Srirangam and Trichinopoly from inscriptions.
12. Eastern Gangas.
13. Tribhuvanam temple.
14. The Solankis.

Politics and Public Administration.

1. The conception of Nationality in the 19th Century.

2. District Municipalities in the Madras Presidency.
3. The Corporation of Madras from 1919.
4. Organization and administration of Public Health in the Madras Presidency.
5. Organization and Administration of Education in the Madras Presidency.
6. The constitutional position of the Governor of Madras since 1960.
7. Theories of Political Representation.

Philosophy.

1. The Philosophy of Gaudapada.
2. A Study of Suresvara's Sambandha-Vartika.
3. The Metaphysical basis of social service in Indian Thought.

Statistics.

1. Applied Statistics: (i) Agricultural production, consumption and requirements of food in Madras Presidency; (ii) Industrial development and factory employment.
2. Sampling theory with reference to testing of hypothesis.

Geography.

1. Rice in India.
2. Hydroelectric power in India.
3. Wheat in India.
4. Geographic Surveys of a few select villages near Madras.
5. Economic Geography of the Manganese Industry in India.
6. Drainage Pattern of South India.

Indian Music.

1. History of Indian Music.
2. Evolution of the Vina.
3. Evolution of Concerts in Medieval and Modern Times.
4. Sacred Music: Its Origin and Development.
5. Origin and evolution of the Tala system in Indian Music.
6. Raga and Rasa.

Zoology Research Laboratory.

1. Osmotic Regulation in Crustacea.
2. Structure and systematics of Lucernarian from Indian Coasts.
3. Studies on Indian anemones (Morphology and taxonomy).
4. The Brackish-water Plankton.
5. Histology and development of Corpus luteum in vertebrates.
6. Structure and function of the nidamental glands Elasmobranchs.

7. Uterus of Elasmobranchs with special reference to the uterine glands.
8. Fish eggs and larvae of the Madras coast.
9. Ceriantharia of the Madras Coast.
10. Luminous organs of Leicognathidae.
11. Tube building organs of Polychaetes.
12. Eyes of Polychaetes.
13. Biology of *Potamidas cingulatus*.
14. Reproduction and life history of *Clibanarius*.

Botany Research Laboratory.

1. Physiology of Parasitism with special reference to soil conditions and the production of wilt diseases in plants.
2. Studies on nutrition of commercial pure strains of Yeasts with special reference to evolving a high SO₂ and alcohol tolerant type for the Wine Industry.
3. Studies on the action of Chemical Preservation on Yeasts and non-pathogenic bacteria with special reference to Fruit Juice Squashes.
4. Preliminary survey of hosts and carrier insects in Plants Viruses with special reference to South Indian Virus disease of economic crops.
5. Cytology and developmental morphology of some south Indian Rhodophyceae.
6. Cytology and life-history of some South Indian Siphonales.
7. Studies on the cytology of *Spirogyra*.
8. Cytology and developmental morphology of some South India Diatoms.
9. Cytology and developmental morphology of some South Indian Liverworts.

Biochemical Laboratory.

1. The Chemical Constitution of the Proteins.
2. Plant, Animal and Bacterial Metabolism with special reference to Nitrogen.
3. Plant Products of Physiological Interest.
4. Indian Dietaries.
5. Enzymes.

Sanskrit.

1. Slokavartika with the commentary of Jayamisra.
2. Rgvedavyakhya of Madhava.
3. Mayoora Sandesa with a Sanskrit commentary by the Reader himself.
4. Jagadvijayachandas of Kavindra-arya.
5. Rgvedanukramani of Madhava.
6. Study on Soma.
7. Transmigration and Law of Karma.
8. Kerala Contribution to Sanskrit Literature.
9. Pancaprakriya of Sarvajnanatman with two commentaries.

10. A revision of the Prakaranapancika of Salikanatha.
11. Kausitaka Sranta Sutra.
12. Kausitaka Brahmana.
13. Rayamukuta's commentary on the Namalinganusasana.
14. Parisistas of Kalyayana.
15. History of Lexicographical Literature in Sanskrit.
16. Catalogus Catalogorum of Sanskrit Manuscripts.
17. Bhoja's Sringaraprakasa.
18. Mudraraksasa Nataka Katha.
19. Sangitasamayasa.
20. Kavindrakalpadruma.
21. Nrsimhasarvasva.
22. Samudra Sangama Grautha.
23. Sringaramanjari of Akbar Shah.

Tamil.

1. Index work: the index of Tolkappiyam, Saṅga Ilakkiyam, and Patinenkilkanakku.
2. History of Tamil Literature.
3. The Publication of "Ramappayyan Ammanil" and "Jivasambhodhane".
4. A treatise on the life and work of Father Beschi, Dr. Caldwell, Dr. Pope, Ellis and other European scholars who have contributed to the Tamil Literature.
5. A Study of Jivakashintamani.
6. Vettalakshnam in the main Dravidian Languages.

Telugu.

1. Age of Nannaya in the History of Telugu Literature.
2. Kumarasambhava of Nannechodadeya.
3. Lives of Telugu Poets on modern lines.

Kannada.

1. Desi Element in Kannada.
2. History of Kannada Poetics.
3. Editing of Rukmangadha Charitre by Chikkupadhyaya.
4. Editing the Jivasambhodhane.
Editing the Asvasastra.

Malayalam.

1. Kali Worship in Kerala.
2. Snake Cult in Malabar.
3. Ancient History of Kerala as gleaned from Ballads.
3. Theory of Rasa.
5. The Practice of "Fasting" (Nombu, among Hindus) based on an old work in Malayalam.

Arabic, Persian and Urdu.

1. Editing Sources of the History of the Nawabs of the Carnatic, Part V.
2. Preparing a press copy of Siapuramam.
3. Preparing a press copy of Timur Nama.
4. Preparing a press copy of Guldasta-i-Karnatak.

Economics.

1. Economic Structure of Reconstructed India.
2. Future Prospects of War Expanded Industries.
3. The Rationale of economic Controls during a War.
4. A short Sketch of Industrial development in the Madras Presidency.
5. The Food Problem of Madras under the following Heads:
 - (a) Cereal Production from 1919-1942 in Madras.
 - (b) Grow More Food Campaign and its effects
 - (c) Post-war Policy.
6. Sterling Balances.
7. War Time Economic Controls.
8. State in Relation to Agriculture.
9. Economic resources of the Madras Presidency.
10. Consumer's Co-operation in Madras.

Mathematics.

1. General Topology: linear and function spaces.
2. Algebraic Arithmetic and Theory of Arithmetical Functions.
3. Tensor Calculus.

Psychology.

1. Children's drawings and their conceptional Development.
2. Personality traits of different groups.
3. Construction of intelligence and vocational tests suitable for high school classes.
4. Psychological measurements in education.
5. The problem of juvenile delinquency in Madras children.
6. An enquiry into the vocational sense of a group of senior pupils of high schools in Madras.
7. Religious education in a national system of education.

NAGPUR.**CITY COLLEGE NAGPUR.**

1. Anthropology.
2. The evolution of literary criticism in Marathi literature.

ROBERTSON COLLEGE, JUBBULPORE.

1. Study of certain functions in Mathematical Physics and also study of Solar Cosmogony.

2. Some work on Ceramics on subject of Investigation: Examination of the Central Provinces Fire clay in General and Jabulpore fire clay in particular with regard to their refractoriness and suitability for the manufacture of refractory materials.
3. Research in the application of intelligence tests as would be suitable to Indian subjects since the existing intelligence tests are fixed to suit European Countries.
4. Accurate information of the extent to which the cultivators have acquired the savings habit and are repaying their debts both to Cooperative societies and other as a result of rise in prices of agricultural Commodities and of the extent of their remaining indebtedness.
 - (a) Sufi Poets of Hindi.
 - (b) Glossery of technical terms in Hindi in accordance with the suggestions of the Director of Public Instruction.
6. The various theories of literature Eastern and Western attempt to analyse them in their main ingredients and the generalization arrived at.
 - (a) Peculiarities of the Indian theory its thorough examination with a view to arrive at its Physiological back-ground.
 - (c) The later as revealed in Hindi Poetry—The past still perpetuating in the present apparent variety and its justification.
7. Research into economics of the aborigines Gonds and Baigas.

LAXMINARAYAN INSTITUTE OF TECHNOLOGY, NAGPUR.

1. Activation of Bauxite and the effect of particle size, etc., on its decolorizing properties.
2. Production of Potassium Permanganate from Ferro manganese by electrolytic method.
3. Examination of C. P. coals and blending tests on them.
4. Extraction of lemon and orange oil (Council of Scientific & Industrial Research Scheme).
5. Utilisation of Groundnut cake.
6. Recovery of Titanium Oxide from red mud.
7. Some rapid analytical methods of estimating Ca, Mg, Cd, etc.
8. Manufacture of oil fabrics.
9. Writing Inks.
10. On the waters of Lonar Lake (Subsidised Research scheme)
11. Porcelain Enamelling (Subsidised Research scheme).

KING EDWARD COLLEGE, AMRAOTI.

1. A critical and comparative study of theory of knowledge in Indian Philosophy with special reference to the Nyaya system.
2. The Nature of Individual self.

3. Some aspects of Economic planning for post-war period in C. P. and Berar.
4. Theorems on operational calculus.
5. Studies in the Panini systems of sanskrit grammar.
6. The Psychic aspect of the comedy in the Sanskrit literature.
7. Research in connection with "Bhavabhuti".
8. The Identification of Pauranic City "Bhadravati".
9. The Exact place from which 'Rukhmini' was taken away by Lord Krishna.
10. Identification of village 'Kaundanyapur' the ancient capital of King 'Bhimak'.
11. A study in the origin and development of Central Legislature in India including that of the Provincial Legislature.
12. Some research work in Urdu Literature (i) Sayyid Hasan of Ghazani (ii) Waqayi-i-Nadir Shah.
13. The Theory of Elasticity and Hydrodynamics.

NATIONAL COLLEGE, NAGPUR.

1. Psychology in Yoga in the light of contemporary schools of Western Psychology.

MORRIS COLLEGE, NAGPUR.

1. Studies in Kalachuri records.
2. Studies in the Records of the Government of India-- 1757-1759.
3. Trends in Modern English Biography.
4. Natia Shairi in Urdu.
5. Studies in Epistemology and Religion.
6. Some new Apabhramsa Works.

COLLEGE OF SCIENCE, NAGPUR.

1. Embryology and Cytology of Aselepiadaceae.
2. Bacterial Diseases of Plants.
3. Culture of *Bacillus radicicola*.
4. Flora of Nagpur.

CHATTISGARH COLLEGE, RAIPUR.

1. Persian Poetry of Ghalib.

ARTS.

Ph.D.

1. Problem of Motion in Madhyamik School.
2. Influence of Mirza Ghalib on prominent Modern Urdu Poets.
3. Rasa Theory and its Psychological Rationale.
4. Premchand.
5. The Relations of the East India Company with Bonslas of Nagpur (A survey and critical study of their political relations particularly from the time of Raghoji II to Raghoji III (1772-1853 A.D.).

6. Social life as reflected in Medieval Sanskrit Literature.
7. The comparative study of the systems of Sanskrit Grammar on the Historical Basis.
8. The Economic Implications and possibilities of Self-sufficient Village communities (with special reference to India).
9. Industrial Labour in C. P. and Berar.
10. India's Balance of payments.
11. (Depiction of Humour in Marathi Literature from the beginning, i.e., 12th Century to the present times).
12. The literary and philosophical merit of Wordsworth's inner experience.
13. With Hardy in his Studio.
14. Economic conditions of Maharashtra during the rule of the Peshwas from 1714-1818 A.D.
15. Malik Ambar.
16. Evolution of Essay in Hindi Literature.
17. Mira, her life, Philosophy and Works.
18. Development of rural Berar.
19. 'Kamaras'—A study in primitive Social life.
20. Municipalities in the Central Provinces and Berar.
21. Shaib—his life and work.
22. The working of the Provincial Autonomy in C. P. and Berar.
23. The development of Humour in the Marathi Drama.
24. History of the Punjab from the earliest times upto 300 A.D.
25. A critical study of Hindi Drama, Dramaturgy and stage.

SCIENCE.

1. Development of the skull of *Calotes versicolor*.
2. The mechanism of the interaction of dispersions (colloidal Solutions and Emulsions) and the structures formed during their interaction".
3. Embryology of *Asclepiadaceae* of some other Angiosperms.
4. The studies of fluorescence in inorganic salts.
5. Embryological studies in *Rubiaceae* and some other Angiosperms.
6. Physico-chemical studies with aqueous fluoride solutions.
7. Studies on the structure and optical Properties of some Aromatic Crystals.
8. Bio-chemical Pharmacological Investigations of certain indigenous plant products with special reference to their hormone therapy.

OSMANIA.

Zoology.

1. Further observations on the structure, Bionomics and Physiology of some Air-breathing Fishes of India.
2. The Fauna of the Hyderabad State.
3. On the Ecology and Fish Fauna of the Pakhal Lake. Published Proc. Ind. Sc. Cong., 1944.

4. Study of the Nematode Parasites from the Avian Fauna of the Hyderabad State (in preparation).
5. On *Enfilaria hyderabadensis* n. Sp. from common crow, *Corvus splendens*.
6. The detailed study of the Anatomy and Histology of the Alimentary Canals in certain groups of Teleost fishes (in preparation).
7. The Morphology and Histology of the Alimentary Tract of *Anabas testudineus* (sent for publication).
8. Observations on the Histological Structure of the Alimentary Tract of a cat-fish ("Maroof" or "Mahgur") *Clarias batrachus* (Linne). (Sent to the Indian Science Congress).
 - (a) Contributions to our knowledge of the detailed Comparative Study of the Morphology and Histology of the Auditory organs in Indian Teleosts, together with special reference to the structure of the Otoliths.
 - (b) On the disposition of the Afferent and Efferent Branchial Vessels and their relationships to the Arterial Arches in general in the Teleostean fishes of India.
 - (c) The comparative study of the structure of the Gas-bladder in various groups of Indian Bony Fishes, together with a discussion on the relationship of the Weberian Ossicles.
 - (d) On the Biology and Economic Importance of the Reptilian Fauna, with special reference to the Ophidia of the Hyderabad State.
 - (e) The Anatomy of a common Indian Teleost, *Ophicephalus striatus*.
 - (f) The detailed and comparative Study of Morphology and Histology of the Kidneys in Indian Teleosts and its Supra-renal Organs, with special reference to Glomeruli.

Engineering.

1. Determination of the coefficient of Discharge of Oblique Weirs.
2. Reducing the period of Submergence of Causeways by giving one-way slope to the surface instead the usual two way camber.

Philosophy.

1. Ethical Attitude of the Philosophy of Gita.

MEDICAL COLLEGE.

Pharmacology.

Ascites in Hyderabad Deccan.

1. Bio-chemical Investigation of Saponin containing Drugs.
2. Cobra Venom as respiratory stimulant.

Physiology.

Electro Cardiography.

1. Orea Clearance.
2. Gastric Hunger Contractions.

Anatomy.

1. "Collecting Data regarding the position and situation of the Vermiform Appendix" in the light of work done by Gladstone and Wakeley.

Pesian.

1. The Life and Persian Works of Hazrat Khawja Bande-Nawaz of Gulbarga.
2. The Life and Poetry of the Poet Naziri of Nishapur.
3. The Life and Work of Mulla Nuruddin Jami.

Indian History.

1. The campaigns of Muhammad Ghori and their reactions on Politics.
2. The Position of Suljoogs in the History of Culture.

Political Science.

1. The Political Thought of Maulana Mohammad Ali.

Philosophy.

1. Rumi and Bergson.
2. Sri Arabandu Ghose's Philosophy.

Economics.

1. Economic Conditions of Hyderabad in the latter part of the Nineteenth Century (1850-1900)

Persian.

1. The Development of Persian Literature with Ghaznawite Period.
2. A Critical Edition of the Tarikh-e-Sultan Mohamad Qutub Shah.

Urdu.

1. Aesthetical Study of Urdu Poetry.
2. Evolution of the Urdu Ghazal.
3. Evolution of the Dakhani Urdu.

4. The Urdu Marthias in the Deccan.
5. The Elements of Hindi and Urdu.

History.

Social and Cultural Movements in Modern India.

Zoology.

1. On a detailed comparative study of the Morphology and Histology of the Kidneys and the suprarenal organs in Indian teleosts with special reference to the structure of glomeruli.
2. The detailed study of Anatomy and Histology of the Alimentary canals in certain groups of Teleostean Fishes.
3. Inter-relationship between Bacteria and insect with particular reference to *Pyrilla* (a very injurious insect to sugarcane).
4. Contributions to our knowledge of the disposition of the Afferent and Efferent Branchial vessels and their relationships to the Arterial Arches in general in the Teleostean Fishes of India.
5. Contributions to our knowledge of the detailed comparative study of the Morphology and Histology of the Auditory organs in Indian Teleosts, together with special reference to the Structure of the Otoliths.

Mathematics.

1. Higher Partial differential equations of Mathematical Physics.
2. Integral Equations and allied subjects.
3. On the Theory of Operators.

English.

“Symbolism.”

Botany.

1. Flora of H.E.H. the Nizam's Dominions.
2. Anatomy, particularly of common Indian herbs.
4. A comparative study of the structure of Pollen grains in some of the families of Angiosperms.
5. Algal flora of Hyderabad.
6. Medicinal plants of Hyderabad.

Chemistry.

1. Study of Photo-Chemical Reactions.
2. Chromatographic Analysis.
3. Magnetic Susceptibility and Molecular Structure.
4. Kinetics of the Solvolytic Reactions of Organic Halides.
5. Spitting and Polymerisation of Vegetable Oils—particularly Castor-Oil.
6. Manufacture of Aluminium Sulphate from clays.

7. Manufacture of Superphosphate.
8. Utilisation of locally available raw materials for Ceramic Industry.
9. Utilisation of the bye-products of Starch manufacture.
10. Manufacture of Glue and Gelatine.
11. Manufacture of pure Alumina from clays.
12. Investigations on Hyderabad Coal for the purpose of utilising it as chemical raw material.

Hydraulic.

1. Determination of the co-efficient of Discharge of Oblique Weirs.
2. Reducing the period of Submergence of Causeways by giving one-way slope to the surface instead the usual two way camber.

PUNJAB.

Economics.

M.A.

1. Production and Preservation of Fruits in the Punjab.
2. Development of Commercial Banking in the Punjab, 1919-1941.
3. Indian Government Financial System during the War.
4. Recent Industrial Development in Jammu and Kashmir State.
5. Woollen Industry in Kashmir.
6. House Boat Industry in Kashmere.
7. The Milk Problem of Lahore in 1943-44.
8. Stock Exchange in the Punjab.
9. Regulation of Agricultural Markets in the Punjab.
10. Vegetable Marketing in Lahore.
11. Punjab Finance between 1933 and 1943.
12. War Time Economy of village of Multan District.
13. Economic Survey of my village in the Punjab.
14. Film Industry in the Punjab.
15. Financial Organisation of Film Industry in the Punjab.
16. Co-operative Finance in the Punjab.
17. Economics of Indian Libraries with special reference to the Punjab Libraries.
18. The Cotton Textile Industry in the Punjab, with special reference to weaving.
19. Agriculture in Kashmir.
20. Survey of the Economic Life of Village Dhudike.
21. Economic Thought in Ancient India.

Economics.

Ph.D.

1. Insurance in the Punjab.
2. Beggars in the Punjab.
3. Indo-Japanese Trade.
4. Indian Finance.
5. Industrial Protection in India.
6. Indian Trade and Industry, Past and Present.

7. Economic Progress in the Punjab.
8. Twenty Years of Punjab Finances, 1921-1940.
9. Economic Life of Modern Iran.
10. National Income of the Punjab.
11. Banking in the Punjab.
12. Industrial Development of the Punjab.
13. Economic Development of the United Provinces.
14. Wool Industry in Northern India.
15. Female and Child Labour in the Punjab.
16. Agricultural Labour in India.
17. Economic Development in Jammu and Kashmir State.
18. The Population of the Punjab.
19. Indian Economic Thought during the 19th and 20th Centuries.
20. Social Institutions in India and their effects on the Economic Life of the People.
21. Labour Conditions in the Punjab.
22. Wealth and Welfare in the Jammu and Kashmir State.

Botany.

1. Colchicine induced polyploidy in economic plants.
2. Embryology in Cupressus.
3. Cytological investigations in fungi.
4. Systematic studies of mosses and liverworts of the Himalayas.
5. Systematic and ecological studies of algae, specially of Indian Marine algae.
6. Studies in the diseases of plants.
7. Studies in fungicides.
8. Mycorrhiza of forest trees and of orchids.
9. Bacterial diseases of plants.
10. Systematic studies of molds of jams and squashes, and water moulds.
11. Soil microbiology with special reference to the soil flora as indicators.
12. Biochemical properties of the molds.

Zoology.

1. Tubellaria of the Kashmir Lakes.
2. Anatomy of Polycoelis.
3. Nephridial system in Indian Polychaetes.
4. Polychaetes of the Arabian sea.
5. Fishes of Karachi.
6. Embryology of a freshwater fish.
7. Studies on Spermatogenesis in spiders.
8. Studies on Spermatogenesis in mammals.
9. The Role of Golgi elements in the Oil Gland of Duck.
10. Spermatogenesis in Fishes and bed-bugs.

Mathematics.

1. Projective Geometry.
2. Theory of Numbers.

Chemistry.

1. Magnetic Studies of Molecular Compounds, with a view to finding their constitution.
2. Magnetic Studies of Periodic acid and its alkali salts.
3. Magnetic Studies of Periodates of transition elements.
4. Magnetic Studies of Periodates of rare earth.
5. Molecular rotations of binary mixtures of Periodic and Iodic acid.
6. Studies in Zanthones. This work has been undertaken to prepare some antiseptics.
7. Acridine Derivatives; These compounds are related to atebirin and other antimalarials. A large number of new compounds have been prepared and these are awaiting pharmacological examination.
8. Oxidation of nitrites and Oxalates in soil.
9. The relative vapour pressure and moisture content of activated alumina and Silica.
10. Interaction between alumina and Silica.
11. Heat of wetting of soils.
12. Absorption of organic vapours by soil.
13. Relative strengths and Dissociation constants of soil acidoid.
14. Mechanical analysis of soils and verification of capillary phenomenon in various liquid.
15. Effect of water on soils under various conditions.
16. Studies in some of the physical properties of cements.
17. Boiling point of water held in soils at different vapour pressure and a new apparatus for determining boiling point and vapour pressure of substances.
18. Determination of equivalent point of soil acidoid.
19. Interaction between ferric oxide, alumina silica and acid soils with sulphides.
20. Interaction between acid soils and Carbonate.
21. Verification of Haines curves in soils.
22. Size distribution and moisture absorption vapour pressure curves of metals and their oxides obtained by different methods.
23. A critical study of some methods for distinguishing the main constituents of soil.
24. Interaction between insoluble weak acids and bases.
25. Activity of silica as effected by the gradual removal of Sesquioxides from ferro-alumino silicates.
26. Absorption of moisture by hydrophobic colloids on precipitation.
27. A study in the composition of metallic colloids.
28. Absorption of CO₂ by soils with different moisture content.
29. Solubility of different solutes in water at different pressures by the application of partition law.
30. Constitution of Chalksine.
31. Preparation of local Anaesthetics.
32. Carotinoids:
 - i. Development, source of metabolism.
 - ii. Conversion of carotene into Vitamin "A".

33. Vitamin "C".
34. Fermentation. Development of potent strains of yeast.
35. Vitamin "A".
36. Calcium and Phosphorus metabolism.
37. Proteins Biological value.
38. Fats and Lipases.

PATNA.

Chemistry.

1. Studies on the Hydrides of metals.
2. The nature of metal pyridine complexes.
3. The destructive distillation of paddy husks.
4. Absorption in relation to constitution; absorption of gases and vapours on silica gel.
5. The preparation of cyanine dyes of thiazole series.
6. Studies in Idigoid dyes: Preparation of Bis-2 (7-methyl) thionaphthene-ethylene indigos and Benzylidene-2(7-methyl) thionaphthenes.
7. Complex compounds of copper with Benzimidazole.

Physics.

1. On the recombination coefficient of ions in the ionosphere.
2. On the theory of *B* Decoy.
3. Optical properties of metals.
4. Photo-magnetic effects.
5. On the condition of rupture of liquid drops while colliding against liquid surfaces.
6. Absorption spectra of alkali vapour at different temperatures and pressures.
7. Absorption spectra of salt solutions.
8. The recombination spectra.

Biology.

1. Effect of different stimuli on the orientation of the plant *Bassella corydolia*.
2. Vernalisation of certain seeds commonly grown in gardens.
3. March of transpiration in different plants in the course of the day of a particular season.
4. Experiments on the change of sex in the Papaya tree.
5. Effect of animal hormones on plant growth.
6. Histological changes connected with vitamin deficiency in a guinea pig.
7. Cytoplasmic inclusions in the sex cells of certain lizards.

Mathematics.

1. On reciprocal differences in different Algebra.
2. On Boolean Rings with multiple variables.
3. On Irrational number theory.

TRAVANCORE.*Mathematics.*

1. Factor Analysis with special reference to Biological and Economic Data.
2. Small sample Theory.
3. Trends in Time Series.
4. Testing hypotheses in the sense of Neyman-Pearson.
5. Asymptotic Forms and Limiting Forms of Distribution Functions.
6. Stellar Statistics.
7. Statistical Study of some Meteorological data available at the Trivandrum Observatory.

Engineering.

1. Pole face losses due to open slots in high-speed machinery.
2. Conditions for pipes to run full.
3. Propellar pumps.
4. Efficiency of treated fuels in Gas Producers.
5. Jointly with Chemistry—Production of Charcoal for Gas producers and performance tests.

Physics.

1. Scattering of light in relation to Liquid state.
2. X-ray studies of crystals and minerals.
3. Radio-activity of Mineral waters.
4. Supersonics—absorption and dispersion.
5. Physical nature of Polish.
6. Magnetic and electric properties of Travancore Minerals.
7. Magnetic survey of Travancore with special reference to ore bodies in North Travancore.

Agricultural Chemistry.

1. Soil Fertility Investigations with special reference to Potassium.
2. The effect of flooding with salt water on the fertility of the soil.
3. Studies on the Utilisation of fish wastes for manurial purposes.
4. Nitrogen Fixation in Travancore soils.

Industrial Chemistry.

1. Preparation of plastics and baking enamels from cashew shell oil.
2. Examination of indigenous rubber yielding plants—*Alstonia scholaris*, *Tabernamontana heyneana* and *Cryptolepis buchananii*.
3. Constitution of Rhabdiol—a sterol isolated from the roots of *Rhabdia lycioides*, Mart.
4. Constitution of Bridelyl alcohol isolated from the leaves of *Bridelia stipularis*.

5. Studies on a new sugar occurring in *Holostemina annulare*.
6. Synthesis of certain quinoline and iso-quinoline derivatives.
7. Studies in the Chemistry of Travancore Forest Products—resins, gums, fixed and essential oils.
8. Chemical examination of the bark of *Odina Wodier*, Forxb.
9. Investigations on the use of *Odina Wodier* bark extract as a vegetable dye.
10. Examination of the anthocyanin pigment of *Melastoma malabaricum*.
11. Examination of the alkaloids of *Datura fastuosa*, *Gomphrena decumbens* and *Crotons sparsiflora*.
12. Preliminary examination of the poisonous principles of *Dieffenbachia*, sp.
13. Studies in the Chemistry of poisonous fungi indigenous to Travancore.
14. Studies in the technology of Shark Liver Oil including a special investigation on Antioxidants.
15. Examination of other marine oils—whale oil—Turtle oil etc.
16. Preparation of insecticidal soaps.
17. Studies in carbonisation technology.
18. Recovery of potassium chloride from the bitters of the salt pans.
19. Use of concentrated bitters in the clarification of drinking water for town supply as a substitute of Aluminium alum.
20. The concentration of Titanium di-oxide in low grade ilmenite sand.
21. Separation of mesothorium, thorium, cerium, Lanthanum and dydinium salts from monazite.
22. Mineral waters of Travancore.
23. A study of the composition of the different kinds of bannanas available in Travancore.

Zoology and Entomology.

1. A comparative study of the morphology and histology of the alimentary canal of Coleopterous larvae.
2. A study of the development of *Penaeus* sp.
3. The Rice Swarming Caterpillar (*Spodoptera mauritia*) and its control in the Kuttanad Paddy fields of Travancore.
4. Studies on *Nephantis serinopa* M and its parasite complex
5. Insect pests of the tapioca plant.
6. Insect pests on
 - (a) *Artocarpus integrifolia* (jack tree).
 - (b) Stored bamboo (*Bamboosa arundinacea*).
 - (c) Stored ginger, cashewnuts and pepper.
 - (d) Stored copra.
 - (e) Imported wheat.
 - (f) Stored tapioca chips and tapioca flour.
7. Detailed studies on the insecticidal values of *Anamirta Cocculus* and *Derris breviceps*.
8. General life history studies of the two beetles *Necrobia rufipes* and *Rhizopertha dominica*.

9. Investigations on the insect pests of Cardamom in Travancore with special reference to the detailed biology of the hairy caterpillar pests.
10. General studies on plant galls and their makers with special reference to those occurring on plants of economic importance and a systematic study of the Travancore Itonididae.

Marine Biology and Fisheries.

1. Crabs of Travancore with special reference to the edible varieties.
2. A preliminary study of fresh water plankton.
3. Medusae of the Travancore coast and their relation to fisheries.
4. Blind fishes of Travancore.
5. Hydrographical investigations of Cochin backwaters.
6. Anatomy of the mollusc Sanguinolaria diplos.
7. The Cuniacea of the Travancore coast.
8. The bottom fauna and bottom deposits of Travancore coast.
9. Studies on the effect of temperature on the respiratory processes of fishes.
10. Monograph on the common fresh water fish Wallagonia attu (Bloch).
11. Embryology of Chiloseyllium griesium.
12. Phosphate and silicate contents of sea water in relation to diatom intensity.
13. Larval and post larval fishes of the Travancore coast (completed).
14. Food and feeding habits of bottom fishes.
15. Air bladder in sciaenid fishes.
16. Investigation of improved methods of fishing with a view to increase production.
17. Plankton studies in relation to temperature salinity and direction of currents.

Mycology.

1. Isolation of the organism causing tapioca root rot disease and selection of resistant varieties for multiplication.
2. Injection experiments for the diagnosis of and the causes for the coconut palm diseases.
3. 'Bunchy top' disease of Plantains.

Water Analysis.

1. Mineral waters of Travancore.
2. Utilisation of bitters for treatment of water.
3. Lime Industry of Travancore.
4. Studies in water purification.
5. Effect of alkaline waters on the cooking of certain cereals.
6. Control of tuberculation of cast iron pipes by lime treatment.

Economic Botany.

Paddy.

1. Single plant selection in *Chamba* and *Cherumony*.
2. Intervarietal hybridisation between the above two varieties.
3. Study of the development of the paddy plant *Chamba*.
4. Collection and study of the wild paddy of Travancore.

Sesamum.

5. Single plant selection from the local strains.
6. Interspecific hybridisation between *sesamum Orientale* and *sesamum grandiflorum*.
7. Artificial production of amphidiploids.
8. Cytogenetical studies on the genus *sesamum*.

Tapioca (Manihot utilissima).

9. Collection and classification of varieties.
10. Cytological studies.
11. Further studies on the polyploids.
12. Intervarietal and interspecific hybridisation and selection from the hybrids.
13. Anatomical study of the tubers.
14. Investigations on cultural practices.

Fibre plants.

15. Study of the fibre yielding plants of Travancore.
16. Study of the development of the fibre in the coconut fruit.

Vegetable crops.

17. A cytogenetical study of *solanum* species occurring in Travancore.

Medical and Public Health Subjects.

Bacteriology.

1. Prophylactic inoculation against cholera.
2. Deterrant effect of *Pseudomonas pyocyaneus* on the isolation of bacterium typhosum.
3. Study of the strains of vibrium cholera isolated during the epidemic in Travancore (1944).

Serology.

1. Non specific factors in precipitin reaction.
2. Blood groups in Travancore.

Pathology.

1. Eosinophil variations in Tropical Eosinophilia and the effect of arsenicals.

Entomology.

1. Studies on "Flea Index".
2. Morphology and Bionomics of the culicidae of Travancore.

3. Food preference of mosquitoes in the malarial and filarial tracts of Travancore.
4. Bacterial flora of House flies.

Nutrition.

1. Diet surveys of communities in Travancore.
2. Experiments on supplementary feeding in schools :—
 - (a) Whole milk powder.
 - (b) Beaten rice and green gram.
 - (c) Multi-vitamin tablets.
3. Calcium in relation to human metabolism (Nutritional status).
4. Dietary and nutritional changes caused by food shortage.

Biochemistry.

1. A synthetic media for the culture of micro-organisms.
2. Studies on 'Pyocyanin'.

ARTS.

1. Travancore Transport Problem.
2. Conception and number of Pramāṇas according to Vṛttikara Upavarṣa.
3. Mantra citations in the ritual and philosophical texts.
4. History of the Rīg Vedic exegis in Sanskrit up to Sayana.
5. The Mahābhārata—a textual study with special reference to ancient Kerala manuscripts.
6. Contribution of Kerala to Indian Astronomy.
7. An estimate of the contributions of Melpattur Narayana Bhaṭṭathiri to Sanskrit literature.
8. Suresvarācārya's contribution to Advaita Philosophy with special reference to Nāiskarmyasiddhi.

UTKAL.

1. Inducing Flood Resistance and Draught Resistance in Paddy by presowing Treatment of seeds.
2. C/N ratio of Paddy Plants subjected to different photo-periods.
3. Wood Anatomy. (mimosa Pudica).
4. Raman Effect.
5. Mixture law of Viscosity of solution containing an electrolyte and a non-electrolyte.
6. Analytical Chemistry.
7. Apparent molal volume of electrolytes.
8. Respiration of Mimosa Pudica.
9. Apparent Molal Volume of Electrolytes.
10. Solubility Products of Sulphides.
11. Mixture Law of the viscosity of solutions containing an Electrolyte and a Non-electrolyte.
12. Examination of the select methods of volumatous Analysis.
13. Spectroscopy.

14. Re-evaluation of electronic charge.
15. Study of the Diffraction Haloes Produced by Lycopodium Powder.
16. Plastics to replace wood in pencils.

H. B. TECHNOLOGICAL INSTITUTE CAWNPORE.

1. Possibility of production of synthetic dyes for anthracene from Shalimar coal tar products.
2. Production of Phosphoric acid and Phosphate of Industrial importance.
3. Production of water softening chemical.
4. Production of fine chemicals sulphanilamide derivatives resorcinol, maleic, anhydride, glycerophosphoric acid etc.
5. Production of Sorbitol from glucose.
6. Production of silver proteinates such as argyrol and Protargol.
7. Production of glass marking ink and pencil.
8. Production of tracing cloth and paper.
9. Preparation of stencil paper.
10. Utilisation of Resinous wood available in Garhwal Hills.
11. Making of Anti-fire foam compounds from Slaughter house waste products.
12. Bleaching of the Caustic liquors in the process of caustic soda manufacture from Reh Salts.
13. Production of Mercurio-chrome satisfying B. P. Specification.
14. Utilisation of Indian asbestos.
15. Preparation of tracing cloth.
16. Production of Plaster of Paris.
17. Castor oil and other oil factice.
18. High temperature graphite lubricants.
19. Vegetable casein.
20. Utilisation of Castor and other oils for the preparation of higher alcohols and esters.
21. Study of oil from Rohini seed for factice manufacture.
22. Regeneration of Ni-catalyst.
23. Synthetic plastic materials from oils and allied products.
24. Utilisation of organic bye-products of factice preparation.
25. Utilisation of Rosin for the preparation of high melting point gums.
26. Honing stones.
27. Lacquer for food tin containers.
28. Preparation of wax substitutes.
29. Dryage of soap.
30. Utilisation of waste products of oil industry for the manufacture of lamp black.

INDIAN INSTITUTE OF PHILOSOPHY AMALNER.

1. The Concept of 'Saksi' or Transcendental Consciousness in Advaitism.
2. Self and Reality.

3. Vedantic theory of knowledge and Reality (with particular reference to Kant and Hegel).
4. Later Vedantic Thought and the Madhyamika System of Buddhism.

BHANDARKAR ORIENTAL RESEARCH INSTITUTE

POONA.

1. Critical Edition of the Mahabharata.
2. Cultural Index of the Puranas.
3. Vedic Mythological Traits.
4. Vedic Psychological Studies.
5. Revised Edition of the Vedic Index.
6. Bibliography of Epic and Purana Studies.

